Targeting Inflation Expectations?

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Abstract

This paper studies how inflation expectations respond to monetary-policy regime changes. I develop a New Keynesian model with trend inflation and adaptive learning in which adopting inflation targeting (IT) is a downward shift in the central bank's inflation objective. Under rational expectations, expected inflation adjusts on impact. Under adaptive learning, beliefs update gradually and expectations adjust only partially between announcement and implementation. I then use professional-forecaster surveys for 32 countries and exploit staggered IT adoption to trace expectations and realized inflation around regime transitions. Empirically, inflation declines following adoption, while survey expectations exhibit little systematic adjustment. The results indicate that inflation leads expectations, at odds with the canonical New Keynesian rational-expectations prediction, and imply that credibility can be built over time as policy delivers lower inflation outcomes.

Keywords: *Inflation Expectations, Monetary Policy, Subjective Expectations, Adaptive Learning, Inflation, Regime Shifts*

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1 Introduction

Inflation expectations influence wage- and price-setting and are central to the monetary transmission mechanism. Motivated by this channel, central banks adopt explicit monetary frameworks—most prominently inflation targeting (IT)—and communicate regime changes to shape beliefs about future inflation. In standard New Keynesian benchmarks, a credible regime transition shifts longer-run expectations and thereby improves inflation dynamics. Yet there is limited evidence on how the *level* of inflation expectations behaves at the moment economies transition between monetary regimes.[1]

This paper fills this gap by studying how the *level* of inflation expectations (mean of priors) adjusts at monetary-policy regime transitions, using the adoption of inflation targeting as a concrete instance of an explicit monetary-policy regime transition. The question is first-order for both theory and policy. In New Keynesian models, the inflation consequences of a regime change depend on whether longer-run expectations move toward the implied long-run inflation objective—and, if they do, by how much. Accordingly, movements in the level of expectations at the transition provide direct evidence on credibility.

Figures 1a and 1b illustrate the motivating puzzle using two prominent episodes. In Colombia, both inflation and inflation expectations decline around the shift to an inflation-targeting framework in 1999. In the United States, by contrast, expectations show little discrete movement around the adoption of IT in 2012.[2] Instead, the largest movements in inflation and expectations occur around the global financial crisis. Together, these episodes motivate the theoretical and empirical analysis that follows.

To study this question, I pair a theoretical benchmark with cross-country survey evidence. On the theory side, I develop a New Keynesian model with trend inflation in which the economy undergoes an explicit monetary-regime transition and agents may deviate from rational expectations. Under *rational expectations*, *full credibility*, and *commitment*, once the new regime is *common knowledge*, the model predicts that inflation expectations adjust on impact to the model-implied level under the new policy rule. Under adaptive learning, agents update beliefs recursively, implying a gradual

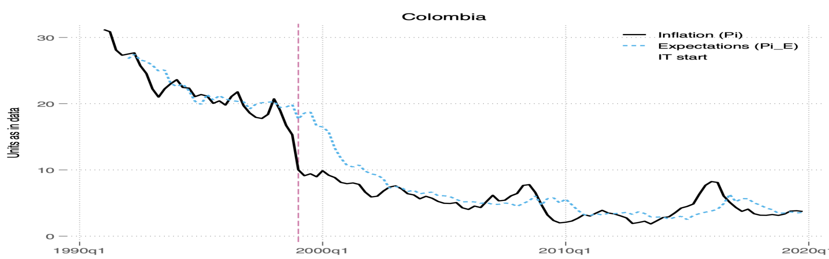
[1]Recent U.S. framework revisions underscore the practical relevance of regime transitions: the 2020 Statement introduced flexible average inflation targeting, and the 2025 review removed the average/-makeup element while reaffirming a 2% longer-run inflation goal.

[2]Formally, an inflation-targeting regime requires an explicit numerical inflation objective. On this definition, the United States adopts IT in January 2012, when the FOMC first stated a 2% longer-run inflation goal.

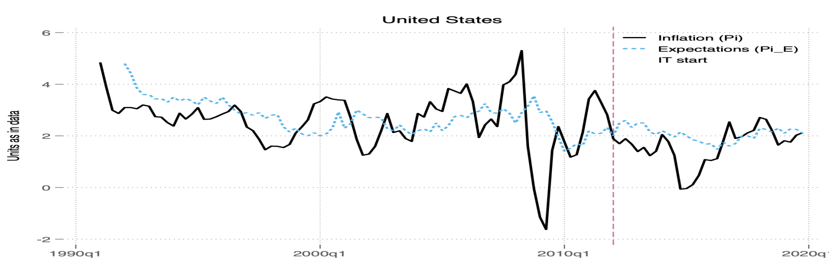
adjustment of expectations to the inflation target based on observed inflation outcomes. The regime transition model, therefore, provides a transparent set of benchmarks for interpreting the empirical dynamics of expectations around adoption.

Figure 1: Inflation and Inflation Expectations: Colombia and the United States

(a) Colombia



(b) United States



Note: The solid line is quarterly year-on-year realized inflation; the blue dashed line is one-year-ahead survey inflation expectations of professional forecasters. The red vertical line marks the introduction of IT: 1999 in Colombia and 2012 in the United States.

On the empirical side, I exploit the staggered adoption of IT across countries in an event-study design for survey inflation expectations and realized inflation. Because survey data directly measure beliefs, the approach does not require inferring expectations from asset prices. The empirical framework follows the imputation-based event-study estimator of Borusyak et al. (2024), which is well suited to staggered treatment timing and dynamic responses.

The main findings are threefold. First, one-year-ahead inflation expectations exhibit little systematic movement around IT adoption: estimated effects are close to zero throughout the event window, and any longer-horizon declines are modest and not statistically distinguishable from zero. Second, realized inflation falls following adoption, with larger declines in economies with a single price-stability mandate. Third, these patterns are robust to alternative specifications and to controlling for observed cross-country differences in central bank institutions, including transparency and credibility measures. Taken together, the results are difficult to reconcile with an expectations-first channel in which regime adoption immediately shifts inflation expectations.

A potential confound is that the muted adjustment in expectation levels could reflect a change in agents' responsiveness to new information at the regime transition. In particular, the gain when agents are learning could change, altering the speed of adjustment even if the perceived long-run inflation level does not move. I assess this by testing for changes to the slope in the responsiveness of forecast revisions to forecast errors. I find little evidence of systematic changes in this responsiveness around the introduction of IT. This makes it unlikely that the flat response of expectation levels around IT reflects an offsetting change in the learning gain.

Overall, the dynamics indicate that inflation adjusts before inflation expectations, with little evidence of belief revision at the time of the regime change. The policy implication is that credibility is built through delivered outcomes: sustained reductions in inflation can anchor expectations, rather than announcements alone.

Related literature. This paper contributes to three primary strands of literature: the formation of inflation expectations, the macroeconomic impacts of Inflation Targeting (IT), and the credibility of central banks.

First, the paper contributes to the literature on inflation expectations and belief formation in response to monetary policy changes, with a particular focus on regime transitions under deviations from rationality. Classic contributions such as Marcet and Sargent (1989b) and Evans and Honkapohja (2012) formalize the idea that agents behave like econometricians, using past information to forecast macroeconomic conditions. Building on this tradition, the paper studies how the information content of past inflation is mapped into survey expectations around a policy regime change, and how this mapping differs before and after IT adoption. A large empirical literature documents deviations from Full Information Rational Expectations (FIRE) among professional forecasters and other agents (Mankiw et al., 2003; Erceg and Levin, 2003; Eusepi and Preston, 2011; Coibion and Gorodnichenko, 2015; Coibion et al., 2018; Bordalo et al., 2020; Carvalho et al., 2023; Gáti, 2023). While some contributions study belief updating around major disinflation episodes or policy shifts (e.g., Erceg and Levin, 2003), existing work has not, to my knowledge, combined an explicit adaptive-learning mechanism with a multi-country event-study design around IT adoption using survey expectations data. This paper fills that gap.

Second, while a substantial literature examines the macroeconomic effects of IT on inflation and real activity, there is relatively less work on how regime changes affect inflation expectations directly. Seminal contributions such as Cecchetti and Ehrmann (1999), Ball and Sheridan (2004), and Levin et al. (2004) provide foundational evidence on the broader impacts of IT. Much of the work on policy changes and expectations, however, relies on high-frequency financial instruments (for instance, term premia, forward rates) rather than survey expectations (see, for example, Gürkaynak et al., 2010b,a). Moreover, many analyzes are conducted under rational expectations or focus on a single policy episode; for instance, Coibion et al. (2020) studies household expectations under Average Inflation Targeting (AIT) in the United States. This paper instead uses survey expectations across a wide set of IT adopters with heterogeneous inflation histories, providing a direct measure of expectations and a unified empirical design that exploits the staggered timing of regime adoption.

Third, the paper relates to the credibility literature. Existing models such as Kostadinov and Roldán (2020) and King and Lu (2022) study environments in which agents infer the policymaker's type from post-change actions. In contrast, my empirical setting treats the adoption of IT as publicly announced and observable, and uses survey data to assess how expectations evolve following regime change. The results are consistent with the mechanism emphasized in Duggal and Rojas (2023), in which realized inflation and the announced target jointly shape belief updating.

Section II presents a New Keynesian model and characterizes the implied dynamics of inflation expectations. Section III links the model to the empirical analysis and derives the testable implications. Section IV describes the data and reports summary statistics. Section V outlines the empirical framework and presents the main results. Section VI reports robustness checks across alternative definitions and estimators. Section VII concludes and discusses directions for future research.

2 Agents' Expectations

This section develops a tractable New Keynesian environment with trend inflation and an explicit monetary-regime transition, and uses it to characterize the implied dynamics of inflation expectations under alternative expectation-formation assumptions. The framework serves two purposes. First, it provides a disciplined benchmark for how expectations respond when the monetary policy rule changes in an economy with trend inflation. Second, it delivers transparent, testable implications that guide the interpretation of the event-study evidence.

I consider two expectation-formation regimes. The first is a full-information rational-expectations benchmark in which agents understand the policy rule and the regime change is common knowledge. In addition, agents know the underlying economic structure—i.e., the mapping from fundamentals and policy to inflation and other endogenous outcomes—so the regime shift changes the perceived inflation process in a model-consistent way and delivers a sharp prediction for the path of one-year-ahead expectations around adoption. The second departs from rational expectations by allowing agents to form beliefs through adaptive learning, following Marcet and Sargent (1989a) and Evans et al. (2001). Agents behave as econometricians who update perceived inflation dynamics using realized data, so expectations may adjust gradually even when the policy framework changes discretely. The contrast between these regimes yields testable predictions for expectation dynamics at regime transitions, which I take to the data in the next section.

2.1 NK Model of Regime Changes

I use a New Keynesian model à la Galí (2015) to study the behavior of expectations around an announced (anticipated) change in the monetary policy regime. Because inflation targets are non-zero in practice, I augment the standard framework with trend inflation, following Ascari and Sbordone (2014). Specifically, I (i) allow for an anticipated shift in the policy rule and (ii) consider both a full-information rational-expectations benchmark and an adaptive-learning specification in which agents update perceived inflation dynamics using realized data. To the best of my knowledge, existing work with trend inflation introduces either regime changes or departures from rational expectations, but not both concurrently. The building blocks of the model are as follows.

Households The demand side of the model features a representative household which maximizes an intertemporal utility function separable in consumption (C_t) and labour supply (N_t).

$$\mathbb{E}_t \sum_{j=0}^{\infty} \beta^j \Big[\frac{C_{t+j}^{1-\sigma}}{1-\sigma} - \Psi \frac{N_{t+j}^{1+\phi}}{1+\phi}\Big] \tag{1}$$

subject to the per-period budget constraint given by,

$$P_tC_t + (1+i_t)^{-1}B_t = W_tN_t + D_t + B_{t-1} \tag{2}$$

Where, i_t is the nominal interest rate, B_t is the holding of per period bonds, D_t are distributed dividends (profits), Ψ is the utility weight on hours worked, σ is the intertemporal elasticity of substiution in consumption, and ϕ is the Frish elasticity of labour supply. Maximizing (1) subject to (2) yields the following Euler equation,

$$\frac{1}{C_t^\sigma} = \beta\mathbb{E}_t\Big[\Big(\frac{P_t}{P_{t+1}}\Big)(1+i_t)\Big(\frac{1}{C_{t+1}^\sigma}\Big)\Big] \tag{3}$$

and the intratemporal condition between C_t and N_t is given by,

$$w_t \equiv \frac{W_t}{P_t}\Psi N_t^\phi C_t^\sigma \tag{4}$$

Technology In each period t, a final good, Y_t is produced by a perfectly competitive firm, which combines output from intermediate good producers whose output is given by, $Y_{i,t}$ $\forall i \in (0,1)$, via the techology,

$$Y_t = \Big[\int_0^1 Y_{i.t}^{\frac{\epsilon-1}{\epsilon}} di\Big]^{\frac{\epsilon}{\epsilon-1}} \tag{5}$$

The price associated with the final good is a CES aggregate price $P_{i,t}$ given by,

$$P_t = \Big[\int_0^1 P_{i.t}^{1-\epsilon} di\Big]^{\frac{1}{1-\epsilon}} \tag{6}$$

Therefore the demand schedule for each intermediate good $Y_{i.t}$ is given by,

$$Y_{i,t} = \Big(\frac{P_{i,t}}{P_t}\Big)^{-\epsilon} Y_t \tag{7}$$

These intermediate goods are produced with a linear techmology, where the only input is labour,

$$Y_{i.t} = A_tN_{i,t}^{1-\alpha} \tag{8}$$

Here, A_t is a stationary process for aggregate technology. I assume the marginal cost is the same for each firm because of constant returns to scale technology and the fact that wages are set in a perfectly competitive market. Thus, marginal cost is given by,

$$MC_{i,t} = MC_t = \frac{W_t}{A_t P_t} \tag{9}$$

Price Setting Given that there is imperfect substitutability, this implies market power for intermediate goods. I assume the Calvo price setting behaviour for the intermediate good producers. This implies, that nominal price can be re-optimised with a probability $(1-\theta)$, while with probability θ the price remains unchanged from the previous period. Therefore, the problem of firm i, which sets a price at time t, is to choose $P^*_{i,t}$ to maximise expected profits,

$$\mathbb{E}_t \sum_{j=0}^{\infty} \theta^j \underbrace{\beta^j \frac{\lambda_{t+j}}{\lambda_0}}_{D_{t,t+j}} \Big[\underbrace{\frac{P^*_{i.t}}{P_t}}_{p^*_{i,t}} Y_{i,t+j} - \underbrace{\frac{W_{i.t+j}}{P_{i,t+j}} \frac{Y_{i,t+j}}{A_{t+j}}}_{TC_{i,t+j}} \Big] \tag{10}$$

subject to the following constraints,

$$Y_{i,t+j} = \Big[\frac{P^*_{i,t} (\bar{\pi}_t^{\chi j})^{1-\mu} (\Pi^{\chi}_{t-1.t+j-1})^{\mu}}{P_t} \Big] Y_{i,t+j} \tag{11}$$

and

$$\Pi_{t+j} = \begin{cases} 1 \text{ if } j = 0 \\ \left(\frac{P_{t+1}}{P_t} \times \cdots \times \frac{P_{t+j}}{P_{t+j-1}} \right) \text{ if } j \geq 1 \end{cases} \tag{12}$$

Π_{t+j} is the cumulative gross inflation rate over j periods. In the maximization problem, $D_{t,t+j}$ is the stochastic discount factor, $p^*_{i,t+j}$ is the relative price level of the optimizing firm at t and $TC_{i,t+j}$ is the total cost for each firm. Following, Christiano et al. (2005), and Yun (1996) I assume that when a firm cannot reoptimize its price (with probability θ), it can costlessly adjust its price according to an indexation rule that depends on past inflation and on the inflation target, which collectively imply trend inflation in this model[3]. Therefore, the optimzation problem of the firm can be re-written as:

$$\mathbb{E}_t \sum_{j=0}^{\infty} \theta^j \beta^j \frac{\lambda_{t+j}}{\lambda_0} \Big[\frac{P^*_{i,t} (\bar{\pi}_t^{\chi j})^{1-\mu} (\Pi^{\chi}_{t-1.t+j-1})^{\mu}}{P_t} Y_{i,t+j} - \frac{W_{i.t+j}}{P_{i,t+j}} \frac{Y_{i,t+j}}{A_{t+j}} \Big] \tag{13}$$

The optimal pricing function then is given by the first order condition and is written

[3]Refer to the subsection of Regime Changes for details

as:

$$\left(\frac{P^*_{i,t}}{P_t}\right)^{1+\frac{\epsilon\alpha}{1-\alpha}} = \frac{\frac{\epsilon}{1-\alpha}}{\epsilon-1}\frac{\mathbb{E}_t\sum_{j=0}^{\infty}(\theta\beta)^j\lambda_{t+j}\frac{W_{t+j}}{P_{t+j}}\left[\frac{Y_{t+j}}{A_{t+j}}\right]^{\frac{1}{1-\alpha}}\left[\frac{(\bar{\pi}_t^{\chi j})^{1-\mu}(\Pi^{\chi}_{t-j,t+j-1})^{\mu}}{\Pi_{t+j}}\right]^{\frac{-\epsilon}{1-\alpha}}}{\mathbb{E}_t\sum_{j=0}^{\infty}(\theta\beta)^j\lambda_{t+j}\left[\frac{(\bar{\pi}_t^{\chi j})^{1-\mu}(\Pi^{\chi}_{t-j,t+j-1})^{\mu}}{\Pi_{t+j}}\right]^{1-\epsilon}Y_{t+j}} \tag{14}$$

Here, $\lambda_{t+j} = u_c = C_t^{-\sigma}$. where $\chi \in [0,1]$ governs the degree of price indexation. The parameter $\mu \in [0,1]$ determines how indexation is split between trend inflation and lagged inflation, allowing for intermediate cases in which firms partially index to each. Moreover, using the market clearing conditions, we have that $C_t^{-\sigma} = Y_t^{-\sigma}$.

$$(p^*_{i,t})^{1+\frac{\epsilon\alpha}{1+\alpha}} = \frac{\epsilon}{(\epsilon-1)(1-\alpha)} \times \frac{\mathbb{E}_t\sum_{j=0}^{\infty}\theta^j D_{t+j}Y_{t+j}MC_{t+j}\Pi^{\epsilon}_{t+j}}{\mathbb{E}_t\sum_{j=0}^{\infty}\theta^j D_{t+j}Y_{t+j}\Pi^{\epsilon-1}_{t+j}} \tag{15}$$

Using equation 14 I can now write the optimal pricing function recursively as follows,

$$(p^*_{i,t})^{1+\frac{\epsilon\alpha}{1-\epsilon\alpha}} = \frac{\epsilon}{(\epsilon-1)(1-\alpha)}\frac{\psi_t}{\varphi_t} \tag{16}$$

Where, φ_t and ψ_t are given as follows,

$$\psi_t = w_t A_t^{\frac{-1}{1-\alpha}} Y_t^{\frac{1}{1-\alpha}-\sigma} + \theta\beta\bar{\pi}_t^{-\frac{\epsilon(1-\mu\chi)}{1-\alpha}}\pi_t^{\frac{-\mu\chi\epsilon}{1-\alpha}}\mathbb{E}_t\pi_{t+1}^{\frac{\epsilon}{1-\alpha}}\psi_{t+1} \tag{17}$$

$$\varphi_t = Y_{t-1}^{1-\sigma} + \theta\beta\bar{\pi}_t^{(1-\mu)(1-\epsilon)\chi}\pi_t^{\chi\mu(1-\epsilon)}\mathbb{E}_t\pi_{t+1}^{\epsilon-1}\varphi_{t+1} \tag{18}$$

ψ_t and φ_t are the discounted value of marginal costs, and marginal revenues, respectively. The aforementioned equations complete the formulation of the model economy with a demand side, supply side, and monetary policy rule. Let us now turn to describing the changes that occur in the model when a new monetary policy regime is introduced.

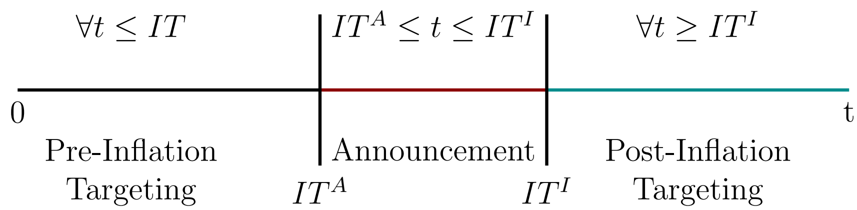
Monetary Policy: Interest Rate Rule The key component of the model for the purpose of this paper is the monetary policy rule. I use a simple rule where the nominal interest rate i_t is determined as follows,

$$i_t = \bar{\pi}_t + \phi_\pi(\pi_t - \bar{\pi}_t) + \phi_y\hat{Y}_t + \vartheta_t \tag{19}$$

Here, $\bar{\pi}_t$ is the trend inflation, and is determined by the monetary policy regime being followed by the central bank. ϕ_π and ϕ_y are non-negative parameters which weight the deviation from trend inflation and output, respectively, ϑ_t is a monetary policy shock.

Regime change The economy features a single structural break associated with the adoption of an inflation targeting (IT) framework. I denote by IT^A the date at which the central bank announces the IT regime, and by IT^I the date at which the new framework is implemented. For all $t < IT^A$ the economy operates under the pre–IT regime; for $IT^A \leq t < IT^I$ the regime change is anticipated but not yet implemented; and for $t \geq IT^I$ the IT regime is in place.

Figure 2: Timing of the model



Trend Inflation and the Inflation Target The trend inflation component is now a function of a past inflation policy π_{t-1} and π^T which is the inflation target set by the central bank.

$$\bar{\pi}_t = (1 - \zeta)\pi_{t-1} + \zeta\pi^T \tag{20}$$

Trend inflation is governed by a regime indicator $\zeta_t \in \{0, 1\}$. Prior to the implementation of inflation targeting, $\zeta_t = 0$ and trend inflation is history-dependent, coinciding with lagged inflation π_{t-1} (consistent with a regime indexed to past inflation). From implementation onward, $\zeta_t = 1$ and trend inflation is pinned down by the constant target π^T. Figure 2 summarizes the timing of the announcement and implementation dates and the associated regimes. After adoption, no further structural changes occur, so the economy remains permanently in the inflation-targeting regime, with a single regime shift at $t = IT^I$.

Indexation parameters The indexation rule in equation (14) is governed by two parameters. The parameter $\chi \in [0, 1]$ controls whether non–optimizing prices are indexed at all, and $\mu \in [0, 1]$ determines the weight on past inflation relative to trend inflation in the indexation term. Before the adoption of IT, I set $\chi = \mu = 1$, so that non–reset prices are fully indexed to lagged inflation and the Phillips curve is hybrid, with lagged inflation capturing intrinsic inertia.

Under inflation targeting, I allow the degree of indexation (χ, μ) to depend on the policy regime and the expectation-formation environment. In the rational-expectations benchmark, I set $\chi = \mu = 0$ in the post-IT regime so that the Phillips curve becomes purely forward-looking after adoption. This choice is motivated by the institutional objective of de-indexing wage and price setting under inflation targeting. Under full-information rational expectations, agents understand both the new policy rule and its intended implications for indexation. Under learning, by contrast, I keep $\chi = \mu = 1$ after adoption, capturing the idea that indexation behavior can adjust only gradually when agents update beliefs from realized data rather than internalizing the regime shift immediately. Importantly, the main results are not driven by the removal of indexation: when I hold (χ, μ) fixed across regimes, I continue to obtain a discrete adjustment in inflation and expectations at the time of the announcement.

Table 1: Indexation parameters across regimes and specifications

	Pre–IT	Post–IT (RE)	Post–IT (Learning)
χ	1	0	1
μ	1	0	1

Note: The table reports the calibration of the indexation parameters (χ, μ) before and after inflation targeting under the two expectation-formation specifications. Indexation is present prior to IT in both cases. After IT, indexation is shut down in the rational-expectations benchmark ($\chi = \mu = 0$), while it is maintained under learning ($\chi = \mu = 1$) to capture slow adjustment of indexation behavior.

Generalized NKPC The regime change described above implies a change in the price setting behavior and therefore, the Generalized New Keynesian Phillips Curve (GNKPC). Below, I provide the log-linearized versions derived from the trend inflation model for the two different regimes.

$$
\hat{\pi}_t = \begin{cases} \frac{\left(1+\frac{\epsilon\alpha}{1-\alpha}\right)\left(\frac{\theta}{1-\theta}\right)}{\left(1+\frac{\epsilon\alpha}{1-\alpha}\right)\left(\frac{\theta}{1-\theta}\right)(1+\beta)}\hat{\pi}_{t-1} + \frac{\left(1+\frac{\epsilon\alpha}{1-\alpha}\right)\left(\frac{\theta\beta}{1-\theta}\right)}{\left(1+\frac{\epsilon\alpha}{1-\alpha}\right)\left(\frac{\theta}{1-\theta}\right)(1+\beta)}\mathbb{E}_t\hat{\pi}_{t+1} \\ + \frac{-(1-\theta\beta)(1-\sigma)+(1-\theta\beta)\left(\frac{\phi+1}{1-\alpha}\right)}{\left(1+\frac{\epsilon\alpha}{1-\alpha}\right)\left(\frac{\theta}{1-\theta}\right)(1+\beta)}\hat{Y}_t - \frac{(1-\theta\beta)\frac{\phi+1}{1-\alpha}}{\left(1+\frac{\epsilon\alpha}{1-\alpha}\right)\left(\frac{\theta}{1-\theta}\right)(1+\beta)}\hat{A}_t \text{ if } t \leq IT^I \\ \frac{(1-\theta\beta\bar{\pi}^{\frac{\epsilon}{1-\alpha}})\left(\frac{\phi+1}{1-\alpha}\right)-(1-\theta\beta\bar{\pi}^{\epsilon-1})(1-\sigma)}{\left(1+\frac{\epsilon\alpha}{1-\alpha}\right)\frac{\theta\bar{\pi}^{\epsilon-1}}{1-\theta\bar{\pi}^{\epsilon-1}}}\hat{Y}_t - \frac{(1-\theta\beta\bar{\pi}^{\frac{\epsilon}{1-\alpha}})\left(\frac{\phi+1}{1-\alpha}\right)}{\left(1+\frac{\epsilon\alpha}{1-\alpha}\right)\frac{\theta\bar{\pi}^{\epsilon-1}}{1-\theta\bar{\pi}^{\epsilon-1}}}\hat{A}_t \\ + \frac{\theta\beta\bar{\pi}^{\frac{\epsilon}{1-\alpha}}-\theta\beta\bar{\pi}^{\epsilon-1}}{\left(1+\frac{\epsilon\alpha}{1-\alpha}\right)\frac{\theta\bar{\pi}^{\epsilon-1}}{1-\theta\bar{\pi}^{\epsilon-1}}}\mathbb{E}_t\hat{\psi}_{t+1} + \frac{\frac{\epsilon}{1-\alpha}[\theta\beta\bar{\pi}^{\frac{\epsilon}{1-\alpha}}-\theta\beta\bar{\pi}^{\epsilon-1}]+\left(\frac{1+\epsilon\alpha}{1-\alpha}\right)\left(\frac{\theta\beta\bar{\pi}^{\epsilon-1}}{1-\theta\bar{\pi}^{\epsilon-1}}\right)}{\left(1+\frac{\epsilon\alpha}{1-\alpha}\right)\frac{\theta\bar{\pi}^{\epsilon-1}}{1-\theta\bar{\pi}^{\epsilon-1}}}\mathbb{E}_t\hat{\pi}_{t+1} \text{ if } t \geq IT^I \end{cases}
$$

Where $\bar{\pi} = \pi^T$, and $\hat{\psi}_{t+1}$ evolves as follows,

$$
\hat{\psi}_t = (1-\theta\bar{\pi}^{\epsilon-1})\Big(\phi\hat{s}_t + (\phi+1)(\tilde{Y}_t - \tilde{Y} + \frac{1-\sigma}{\sigma+\phi}\hat{A}_t)\Big) + \theta\beta\hat{\pi}^{\epsilon}\Big[\mathbb{E}_t\psi_{t+1} + \epsilon\mathbb{E}_t\hat{\pi}_{t+1}\Big] \quad (21)
$$

Before the policy is announced, inflation is determined by past inflation ($\hat{\pi}_{t-1}$), the output gap ($\hat{Y}_t$), and inflation expectations ($\mathbb{E}_t\hat{\pi}_{t+1}$). After the policy announcement, inflation becomes a function of the inflation target ($\bar{\pi}$) and a new term, ψ_t, which captures the evolution of future marginal costs. Comparing the pre- and post-announcement equations reveals that the backward-looking component of the GNKPC is replaced with more forward-looking behavior. This shift is crucial for understanding how inflation adjusts under the new regime. Under FIRE, firms will have full knowledge of the precise changes in inflation dynamics, allowing them to adjust their pricing behavior immediately in response to the announced policy change.

2.1.1 Subjective Expectations

A large literature documents systematic deviations of inflation expectations from the rational expectations hypothesis (REH).[4] Among the many proposed alternatives, I model expectation formation using constant-gain learning. This choice is guided by three considerations. First, a constant-gain rule allows the gain parameter—governing

[4] For example, Branch and Evans (2006, 2017).

the speed of learning—to respond to structural change, so agents do not simply relearn a fixed environment. Second, learning models can replicate the empirical fact documented by Coibion and Gorodnichenko (2015) that forecast errors are correlated with forecast revisions. In particular, Branch and Evans (2006) show that constant-gain learning provides the best in-sample and out-of-sample fit for survey forecasts among recursive forecasting models. Finally, unlike a rational-expectations framework, learning models do not impose full knowledge of the structural model on agents: instead, agents behave as econometricians who estimate forecasting rules to predict future inflation.

Therefore, the benchmark assumption is that agents perceive inflation to evolve accordingly,

$$\pi_t = \beta_t + \epsilon_t \tag{22}$$

where, ϵ_t denotes a transitory shock to inflation and β_t a persistent inflation growth component that drifts slowly over time according to,

$$\beta_t = \beta_{t-1} + \eta_t \tag{23}$$

To simplify the model, I assume that agents perceive both innovations, ϵ_t and η_t, to follow independent normal distributions, $\epsilon_t \sim \mathcal{N}(0, \sigma_\epsilon^2)$ and $\eta_t \sim \mathcal{N}(0, \sigma_\eta^2)$, respectively. Therefore, the innovations are independent of each other and imply $\mathbb{E}[(\epsilon_t, \eta_t)|\mathcal{I}_{t-1}] = 0$. Since agents observe inflation, but do not separately observe the persistent and transitory components driving it, the previous setup defines a filtering problem in which agents need to decompose observed inflation into its persistent and transitory elements, so as to forecast optimally. This unobserved component model gives rise to an optimal filtering problem.

To characterize this problem, I specify the prior beliefs at $t = 0$ about the persistent component as follows

$$\beta_0 \sim \mathcal{N}(\tilde{\beta}_0, \sigma_\beta^2) \tag{24}$$

where, the value of the prior uncertainty σ_β^2 is assumed to be equal to the steady state Kalman filter value. The optimal filtering then implies that posterior beliefs following some history $\mathcal{I}_t$ are given by equation (25),

$$\beta_t|\mathcal{I}_t \sim \mathcal{N}(\tilde{\beta}_t, \sigma_\beta^2) \tag{25}$$

with

$$\tilde{\beta}_t = \tilde{\beta}_{t-1} + \kappa(\pi_t - \tilde{\beta}_{t-1}) \tag{26}$$

$$\kappa = \frac{\sigma_\beta^2 + \sigma_\eta^2}{\sigma_\beta^2 + \sigma_\eta^2 + \sigma_\epsilon^2} \tag{27}$$

Where, κ gives the strength at which agents update their beliefs. Agents' beliefs are thus parsimoniously summarized by the single state variable, $\tilde{\beta}$ describing the agents' degree of credibility about change inflation following the introduction of the new policy.

Generalized NK Model with Regime Changes Let's now put the pieces of the model together. First, the demand side of the economy given by the log-linearized Euler equation

$$\hat{Y}_t = \mathbb{E}_t\hat{Y}_{t+1} - \frac{1}{\sigma}(i_t - \mathbb{E}_t\pi_{t+1}) \tag{28}$$

Next the monetary policy rule given by,

$$i_t = \begin{cases} \pi_{t-1} + \phi_\pi(\pi_t - \pi_{t-1}) + \phi_y\hat{Y}_t + \vartheta_t \text{ for } t \leq IT^I \\ \pi^T + \phi_\pi(\pi_t - \pi^T) + \phi_y\hat{Y}_t + \vartheta_t \text{ for } t \geq IT^I \end{cases} \tag{29}$$

Finally, the supply side of the economy given by the log-linearized New Keynesian Phillips Curve in terms of the output.

$$\hat{\pi}_t = \begin{cases} f(\pi_{t-1}, \hat{Y}_t.\hat{A}_t, \mathbb{E}_t\pi_{t+1}) \text{ if } t \leq IT^I \\ f(\pi^T, \hat{Y}_t.\hat{A}_t, \mathbb{E}_t\pi_{t+1}, \mathbb{E}_t\psi_{t+1}) \text{ if } t \geq IT^I \end{cases} \tag{30}$$

The changes in the model due to the introduction of the changes in the monetary policy rule and the change in the price setting behavior for firms who cannot optimise prices leads to the switch in equations (29) and (30). These changes in the NKPC are the result of firms internalizing the policy changes in their optimising behaviour through the structural parameters χ, μ which are the degree of indexation and the degree of indexation between past inflation and trend inflation. Finally, the monetary policy rule i_t becomes a function of ζ which controls the switch in the policy. Based on the Generalised NK model, I can now solve for the transition path of expectations from no IT to IT.

Solution Method To solve for the path of expectations and inflation in the presence of a structural change, I follow the literature on solving linear rational expectations models with gradual changes in regimes (Binder and Pesaran (1997), Cagliarini and Kulish (2013); Kulish and Pagan (2017)). The choice of the method is based on the fact this method allows for a one-time permanent change which can be anticipated or unanticipated. Thus, for the purpose of this paper, the method allows me to capture anticipatory effects when the regime change occurs. Finally and crucially, the method allows for the timing of change to beliefs to be different from reality.

Table 2: Parameters for the GNK with FIRE

Parameter	Parameter Interpretation	Value
β	Subjective discount factor	0.99
σ	Elasticity of marginal utility of consumption	1
ϕ	Elasticity of labour supply	1
θ	Probability of price re-adjustment	0.75
ϵ	Dixit–Stiglitz elasticity of substitution among goods	10
α	Returns to scale parameter	0
χ	Degree of price indexation	$[0, 1]$
μ	Split between indexation to trend vs. lagged inflation	$[0, 1]$
ϕ_π	Weight on deviations of inflation from target	1.5
ϕ_y	Weight on the output gap	0.5
π^T	Inflation target	2% (annualized)
ζ	Trend-inflation regime indicator	$[0, 1]$

Note: The table reports baseline parameter values for the generalized New Keynesian model under full-information rational expectations (FIRE). Parameters shown as intervals are allowed to vary across regimes/specifications in the exercises below; in particular, (χ, μ) govern the strength and composition of indexation, and ζ governs the law of motion for trend inflation.

This method involves writing the model in a state-space formulation and using the method of undetermined coefficients to solve backward from the point of regime change. Specifically, let the economy follow the structure given by $A_0 y_t = C_0 + A_1 y_{t-1} + B_0 \mathbb{E}_t y_{t+1} + D_0 \epsilon_t$, in the period before the announcement at IT^A. Where y_t is an $n \times 1$ vector of state variables and ϵ_t is an $l \times 1$ vector of exogenous variables. Here, y_t represents a vector of 10 endogenous variables, including $\pi_t^T, \hat{Y}_t, \hat{\pi}_t, \hat{\psi}_t, \hat{\varphi}_t, \hat{s}_t, N_t, w_t, i_t, \bar{\pi}$, and ϵ_t represents two exogenous shocks $\varepsilon_t^a, \varepsilon_t^\vartheta$. At $t = IT^I$ given the structural change, the economy now potentially evolves according to, $A^{IT} y_t = C^{IT} + A^{IT} y_{t-1} + B^{IT} \mathbb{E}_t y_{t+1} + D^{IT} \epsilon_t$. Now, given IT^A - the period when the announcement of the changes takes place -

agents can foresee upcoming changes. In this situation, expectations need to be formed that recognize that agents know that different structures will hold at some point in the future.

2.2 NK Model with Regime Changes and Expectations

2.2.1 Full Information Rational Expectations

The FIRE approach assumes that economic agents have complete knowledge of the economy. Specifically, they do not have any incomplete or noisy information and have model consistent expectations. This implies that they are aware of the mapping between the fundamentals, and the values of the parameters. Therefore, in this economy, agents know that in period $t = IT^I$ the parameter ζ will be 1[5]. Consequently, agents know the path of inflation, and output and other macroeconomic variables conditional on knowing the shocks. This implies, firms are able to make changes to the way they index prices when they are unable to optimally reset the prices. Before IT, there is no policy set by the central bank, therefore, prices set by firms are indexed to past prices. This implies $\mu = \chi = 1$. Once the central bank has an inflation target, and firms internalize this in their price setting behavior, $\mu = \chi = 0$ as now firms index only to trend inflation, which is the inflation target set by the central bank.

I now solve the model under rational expectations to show how expectations adjust accordingly. Table 2 provides the baseline parameter values which allow for a tractable solution to the model proposed. Since, agents have rational expectations in the model, $\mathbb{E}_t \pi_{t+1} = \pi_{t+1}$[6]. To match the data, the timing for the model is quarterly with the inflation target set to 0.005. The announcement in the model is made in period $t = 32$, with the policy being implemented in $t = 40$. This timing is set to match the typical time between the announcement and implementation of IT in the data.

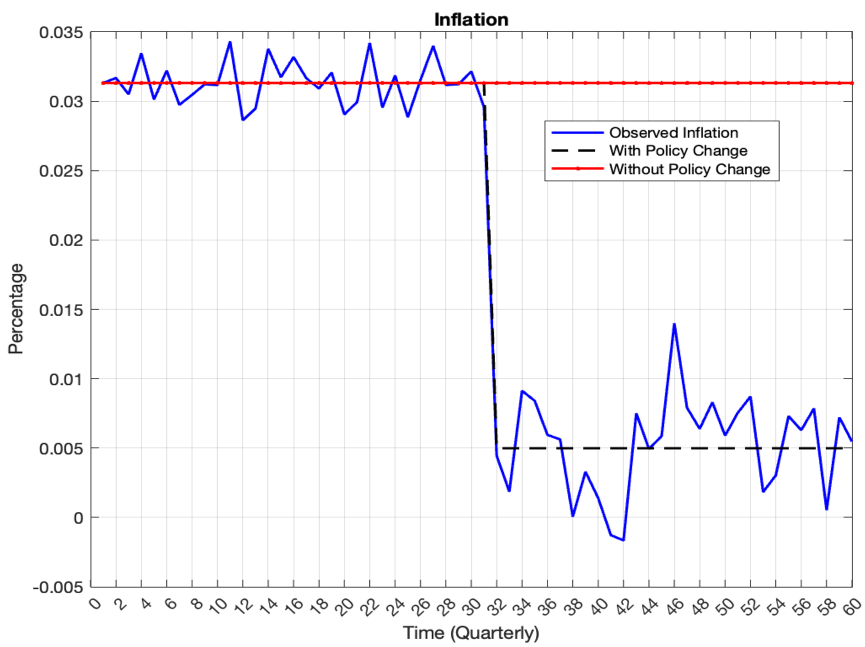
Figure 3 demonstrates the immediate adjustment of inflation expectations following a monetary policy announcement regarding a change to an Inflation Targeting framework. In this setting, agents operate under rational expectations, with full credibility granted to the central bank and a strong commitment to the new policy. This credibility enables agents to fully internalize the policy change as soon as it is announced, leading

[5] There is no ambiguity about when the changes will take place and what those changes will be. Another way to solve this problem would be to not know when the changes would occur, this however, would deviate from the case of full information.

[6] Under a set of specific assumptions about the errors, $\mathbb{E}_t \pi_{t+1} = \pi_t$.

to an immediate adjustment (or “jump”) in inflation expectations. The adjustment occurs because firms alter their price-setting behavior: instead of indexing prices to past inflation, they now base their pricing on the central bank's newly announced inflation target. This forward-looking behavior means that both inflation and inflation expectations converge rapidly to the target level, effectively aligning with the policy objective at the announcement stage itself, without any delay between the announcement and policy implementation. This dynamic underscores the powerful role that credible policy announcements can play in shaping inflation outcomes through agents' expectations.

Figure 3: Change in Expectations after an announcement



Note: The graph represents how expectations evolve over the change in regime. The blue line represents the change in inflation, and inflation expectations following the introduction of the Inflation Targeting. The red and black line show the steady state levels of inflation, prior to and post the introduction of IT.

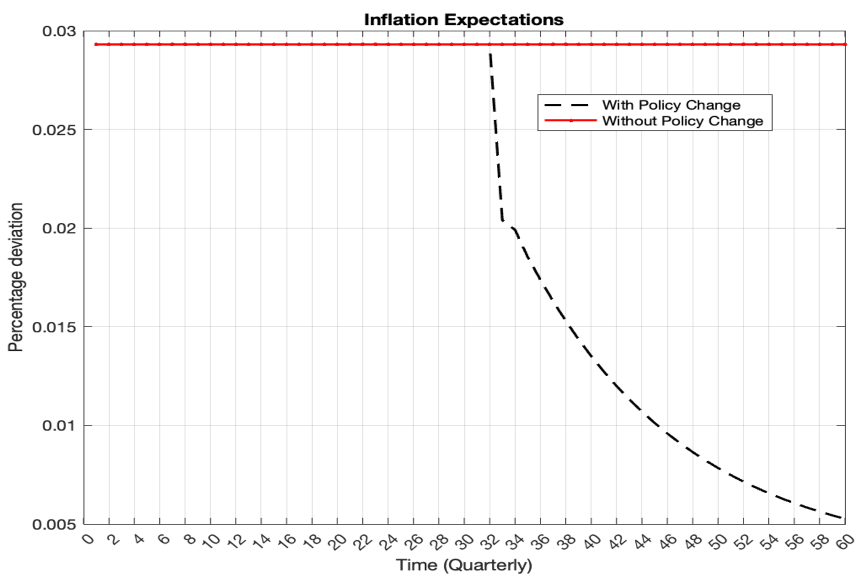
Empirical evidence shows that rational expectations fail, especially for inflation expectations (Mankiw et al., 2003; Eusepi and Preston, 2011; Coibion and Gorodnichenko, 2015). I therefore introduce an alternative belief-formation rule to characterize how expectations evolve when agents do not satisfy rational expectations.

2.2.2 Adaptive Learning

In this section, I present the results from the New Keynesian (NK) model with trend inflation, structural change , and adaptive learning. The expectations rule follows a constant-gain learning model, as outlined in Section 2.1.1, where agents continuously update their expectations based on past forecast errors.

Figures 4 and 5 report the model-implied paths for inflation expectations and realised inflation under adaptive learning and announced regime change. In both simulations, all structural parameters are identical to the rational–expectations benchmark; the only change is that agents update beliefs using the constant–gain rule in (26) with $\kappa = 0.1$.

Figure 4: Change in Expectations after an Announcement

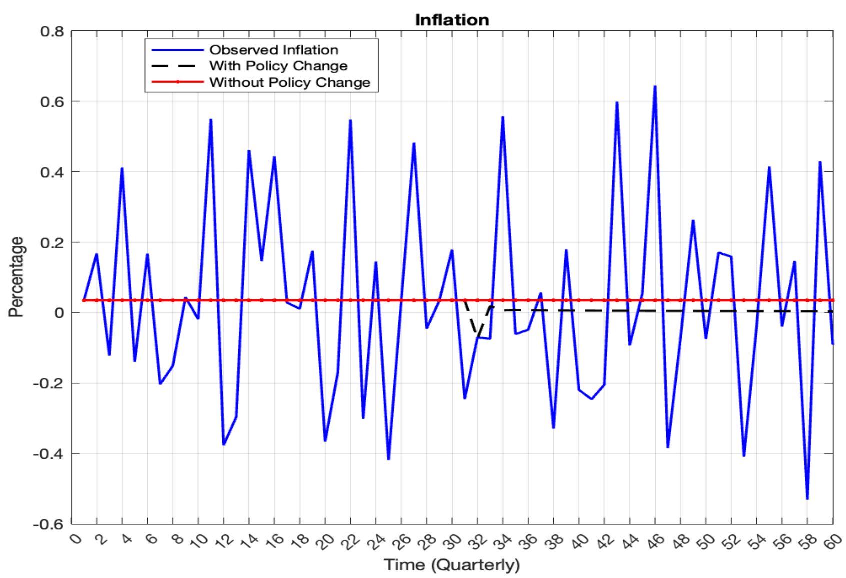


Note: The figure plots the path of inflation expectations when agents update beliefs using the constant–gain learning rule in (26). The red and black lines indicate the periods before and after the policy change, respectively. The gain parameter is set to $\kappa = 0.1$ for this simulation. All other structural parameters are identical to those in the rational–expectations benchmark.

When the central bank *credibly* announces the future policy change, agents recognise that the long-run inflation environment will be tighter and begin to revise down their expectations. Because beliefs evolve according to the constant–gain learning rule rather than rational expectations, this initial response is only partial: expectations move in the right direction but do not jump to the new target. At the announcement date, the first large forecast error generates a relatively pronounced downward revision in expectations; subsequent revisions become progressively smaller as realised inflation approaches the target and forecast errors shrink. This produces the gradual, hump-shaped adjustment in expectations shown in Figure 4.

The credible announcement also affects realized inflation on impact. In the New Keynesian Phillips curve, current inflation depends on expected future inflation, so the downward revision in expectations at the announcement date lowers inflation immediately. However, inflation inherits additional persistence from both price-setting frictions and gradual belief updating. As expectations drift down toward the target, inflation follows with a delay: the blue line in Figure 5 shows that the decline in inflation is initially sizable but then becomes increasingly muted, and it takes substantially longer for inflation to converge to the new target level than under rational expectations.

Figure 5: Change in Observed Inflation after an Announcement



Note: The figure plots the path of realised inflation in the learning model. The red and black lines indicate the periods before and after the policy change, respectively. The blue line reports realised inflation under constant–gain learning with $\kappa = 0.1$. All other structural parameters are identical to those in the rational–expectations benchmark.

The gradual adjustment thus reflects the interaction of learning and nominal rigidities. Firms do not know the full structural model of the economy and do not perfectly anticipate the future inflation path implied by the new regime; instead, they behave as econometricians, revising their perceived mean inflation only partially in response to each new observation. As a result, they do not treat the credible policy announcement as an immediate reason to set prices fully consistently with the new target. Rather, both expectations and prices adjust incrementally as the realised inflation process reveals the implications of the new regime over time. This stands in contrast to the rational–expectations benchmark, in which the same credible announcement leads to a near-immediate realignment of expectations and a much faster convergence of inflation to target.

3 From Theory to Empirics

Building on the results from the model with adaptive learning, I now formulate a testable hypothesis for inflation expectations in the empirical analysis. The adjustment of expectations can be summarised as

$$\beta_t = \beta_{t-1} + \kappa(\pi_t - \beta_{t-1}) + \omega_t^{IT^A}, \tag{31}$$

where β_t denotes agents' inflation expectations at time t, β_{t-1} are expectations from the previous period, and $(\pi_t - \beta_{t-1})$ is the forecast error from the prior period. The term $\kappa(\pi_t - \beta_{t-1})$ captures the generic constant–gain learning component: in the absence of any change in the policy regime, expectations would simply track realised inflation with speed $\kappa \in (0, 1)$. The additional term ω_t captures shifts in the mean of expectations that are induced directly by the change in the monetary policy regime, over and above what is implied mechanically by forecast errors.

Under the model with a credible adoption of inflation targeting, the announcement and subsequent implementation lower the perceived long-run level of inflation. This implies that, between the announcement date IT^A and the implementation date IT^I, expectations should lie below the path implied by generic constant–gain learning:

$$\omega_t^{IT^A} < 0 \quad \text{for } IT^A \leq t < IT^I,$$

or, equivalently,

$$\beta_t < \beta_{t-1} + \kappa(\pi_t - \beta_{t-1}) \quad \text{for } IT^A \leq t < IT^I. \tag{32}$$

In other words, a credible regime change should induce an additional downward shift in expectations, on top of the adjustment implied by learning from realised inflation.

To align this theoretical formulation with the staggered-adoption setting in the data, I re-index the policy-driven component ω_t in event time. Let $s = t - IT^A$ denote the number of periods since the announcement, and define ω_s as the average adjustment in expectations at horizon s across all countries that have adopted inflation targeting. The sequence $\{\omega_s\}_{s\geq 0}$ then traces out the horizon-specific response of expectations to the policy change, directly paralleling the average treatment effects on the treated by event time in the empirical analysis.

This event-time indexing is particularly important given that countries adopt inflation targeting at different calendar dates. By focusing on horizons s rather than calendar time t, I can compare how expectations evolve relative to each country's own announcement date and abstract from common time shocks. Under the credible-regime learning model, ω_s is expected to be negative at short horizons and to decline in magnitude over time: the announcement period $s = 0$ features the largest downward adjustment, and subsequent horizons $s = 1, 2, \ldots$ exhibit progressively smaller additional changes as expectations approach the new target. For instance, one can think of an illustrative sequence in which expectations initially fall by 3 percentage points at $s = 0$, by 2 percentage points at $s = 1$, by 1 percentage point at $s = 2$, and so on, with ω_s converging towards zero as s approaches the implementation date IT^I. This provides a transparent theoretical counterpart to the time-varying average treatment effects on the treated, estimated in the empirical section, and yields a clear hypothesis: if IT is a credible regime change, we should observe a negative, gradually shrinking profile $\{\omega_s\}_{s\geq 0}$ in the data.

4 Data

4.1 Data on Forecasts

The survey measure of inflation expectations is taken from the Ifo World Economic Survey (WES; LMU-ifo Economics & Business Data Center (2019)), a quarterly survey of professional forecasters. The WES collects information on the current and expected future economic situation, including inflation and GDP, at the country level. For inflation, respondents report calendar-year forecasts each quarter. To obtain a rolling one-year-ahead expectation, these calendar-year forecasts are converted into twelve-month-ahead forecasts using time-varying weights. For example, in 2011Q2 the constructed one-year-ahead forecast is defined as $0.75 \times$ forecast for $2011 + 0.25 \times$ forecast for 2012, corresponding to a forecast for inflation over the period 2011Q2–2012Q1.

Realized inflation is measured as quarterly year-on-year consumer price inflation, defined as the percentage change in the CPI index relative to the same quarter of the previous year, obtained from the IMF's International Financial Statistics. Forecasts from quarter t are aligned with realized inflation in quarter t+4, so that both series refer to the same twelve-month horizon.

The resulting data set covers 32 inflation-targeting countries over the period 1991Q1 – 2019Q4 (the last year of the WES). The sample includes advanced economies such as the United States, Japan, and Germany, as well as emerging and developing economies such as Brazil, Chile, and India. This broad cross-section allows for a systematic assessment of how inflation targeting shapes inflation expectations across different institutional and macroeconomic environments.

In addition, the analysis uses information on the timing of the policy regime change. For most countries, formal announcement dates of inflation targeting are not directly observable in standard databases. I therefore compile announcement dates from central bank monetary policy committee minutes and related documents, identifying the first explicit discussion of moving to an interest-rate-based rule (such as a Taylor-type rule) or to an explicit inflation-targeting regime. Since the survey respondents are professional forecasters with access to such information, these first-discussion dates provide a natural measure of the announcement of the new regime and allow me to capture anticipation effects.

Tables D.3 - D.9 summarize the key statistics (mean, standard deviation, and persistence) for inflation, inflation expectations, and forecast errors. The results are split between the period of the policy announcement and its implementation.

The summary statistics reveal a notable preliminary finding: forecast errors increase in many countries following the adoption of inflation targeting. This trend holds for the entire sample and is particularly pronounced in the five years after IT introduction. The persistence of forecast errors, even with a policy designed to enhance credibility, suggests two potential insights. First, inflation expectations may deviate from the rational expectations framework. Second, the transmission of monetary policy may not primarily operate through inflation expectations. To disentangle whether expectations follow the rational expectation hypothesis, I run a test to check if current information can predict forecast errors.

4.1.1 Rational Expectation Hypothesis

If surveys about inflation expectations convey information about true expectations of future inflation, then it is possible to construct a test that verifies whether the Rational Expectation Equilibrium (REE) holds in the data. Under the Rational Expectation Hypothesis (REH) forecast errors must be orthogonal to all the information that is available and relevant to the agents at the moment of making the forecasts. However, if agents form beliefs about inflation according to adaptive expectations then, the forecasting errors may not necessarily be orthogonal to the information agents use to form their forecasts.

This paper follows Adam et al. (2017) and Kohlhas and Walther (2021) to perform the test for the rational expectation hypothesis. Let $E_t^{\mathcal{P}}$ and E_t denote the measure for subjective and rational expectations, respectively. Let $y_{t,t+h}$ denote the actual value of inflation in period $t+h$ and $E_t^{\mathcal{P}} y_{t,t+h}$ represent the forecast of inflation in period $t+h$, reported at time t. Therefore, the forecast error is given by $y_{t,t+h} - E_t^{\mathcal{P}} y_{t,t+h}$. Thus, a negative value of the difference would imply that agents are over-predicting inflation. Therefore, the test run to check the validity of the the hypothesis is the following,

$$y_{t,t+h} = \alpha_1 + \rho_1 y_{t-h,t} + \epsilon_t \tag{33}$$

$$E_t^{\mathcal{P}} y_{t,t+h} = \alpha_2 + \rho_2 y_{t-h,t} + \eta_t \tag{34}$$

Under the null of rational expectations, we would expect, $E_t^{\mathcal{P}} = E_t$. Thus, $H_0 : \rho_1 - \rho_2 = 0$. We can re-write equation (1) and (2) to perform a joint test for the REH. Thus the test is now augmented such that the null hypothesis is, $H_0 : \rho = 0$.

Table 3 reports the pooled Rational Expectations Hypothesis (REH) test. The estimated coefficient on inflation, ρ, is statistically different from zero, with Newey–West standard errors reported in parentheses. I therefore reject the null implication of the REH in the pooled sample. Appendix E reports the corresponding country-level regressions; for most countries, the null is also rejected.

Table 3: REH Test, Panel Data

Variable	Pre-IT	Post-IT
Π_t	.550***	.301***
	(.073)	(.066)
Constant	-15.223***	-1.444***
	(4.181)	(.187)

Note: The regression is of the forecast error for inflation in period $t+h$. Newey–West standard errors are reported in parentheses. The null hypothesis 0: $\rho = 0$ is rejected for this sample. $*p < 0.10, **p < 0.05, ***p < 0.01$

5 The Role of Regime Changes

5.1 Empirical Framework

To estimate the treatment effect as described in (31), the paper uses the event study methodology based on Borusyak et al. (2024). Specifically, the regression is of the form

$$\pi^e_{it} = \pi^e_{it-1} + \kappa(\pi_{it-1} - \pi^e_{it-1}) + D_{it}\tau_{it} + \epsilon_{it} \tag{35}$$

Where, i is each country, t is the time period, π^e_{it} are the inflation expectations taken from the surveys of professional forecasters, π_{it} is the annualized quarterly inflation rate, D_{it} is a dummy variable that takes value 1 if IT is introduced in the economy, 0 otherwise, and τ_{it} is the treatment effect. $\epsilon_{it} \sim N(0, \sigma^2_\epsilon)$ and is orthogonal to all previous information.

Notice that equation (35) is the equivalent of (31) with τ_{it} as the regression coefficient for ω^{ITA}_t for each i and t pair. This implies the regression specification is the updating equation of the agents' beliefs. That is, beliefs today are a weighted average of beliefs in the previous period and the forecast errors committed in the previous period[7].

Once each τ_{it} is estimated, it is used to compute the overall effect of the policy using weights. I detail the procedure for the computation of the treatment effect. To compute the effect of the change in the policy, the estimation needs to be done in three stages. Before describing the details, let us work through some notational details. Let $\{it : D_{it} = 1 \in \Omega_1\}$ be the set of observations that receive treatment (those

[7] An alternative way to interpret equation (35) is to think of constant gain learning akin to the normal returns in the Finance literature (For instance, Fama et al. (1969). Thus, $(\pi^e_{it} - \hat{\pi}^e_{it-1})$ represents the "abnormal" expectations, allowing the measurement of the effect of the treatment

periods where Inflation Targeting is active) and $\{it : D_{it} = 0 \in \Omega_0\}$ be the untreated observations (periods where Inflation Targeting is not active). Let τ_{it} be the effect of the policy on the variable of interest (π_{it}), and $\pi_{it}(0)$ be the potential outcome if the observations were not treated. In addition, let w_{it} be the weights attached to each unit in the computation of the treatment effect. Then, the treatment effect is computed based on the following,

1. **Estimate the Regression Coefficients for Untreated Observations**: For all untreated observations in the set Ω_0, compute the regression coefficients π^e_{it} using Ordinary Least Squares (OLS). Specifically, for this study, the regression is given by equation (35), which is used to estimate $\hat{\kappa}$, the constant gain parameter.

2. **Predict Counterfactual Expectations for Treated Observations**: For all treated observations in the set Ω_1 where $w_{it} \neq 0$, predict the counterfactual inflation expectations $\pi^e_{it}(0)$ using the equation $\pi^e_{it}(0) = \pi^e_{it-1} + \hat{\kappa}(\pi_{it-1} - \pi^e_{it-1})$.

3. **Compute the Treatment Effect**: Calculate the treatment effect for each treated observation as $\tau_{it} = \pi^e_{it} - \pi^e_{it}(0)$. This gives the period- and unit-specific treatment effect.

4. **Aggregate the Treatment Effects Over Time**: Compute the average treatment effect for each relative time period after treatment using the weights $w_{ih} = \frac{1}{|\Omega_{1,h}|}$, where $\Omega_{1,h} = \{it : h = t - IT\}$ represents the set of observations with the same time since the policy adoption.

5. **Compute the Overall Treatment Effect**: The overall treatment effect for each horizon h is given by the weighted average $\tau_h = \sum_{i \in \Omega_{1,h}} w_{ih}\tau_{ih}$, where the weights $w_{it,h} = \frac{1}{|\Omega_{1,h}|}$ ensure that the treatment effects are properly averaged across observations at each time period.

6. **Report the Treatment Effects Across Horizons**: Finally, report τ_h, the estimand of the treatment effect, across different horizons $h = \{1, 2, 3, 4, 5, 6, 7, 8\}$, which represent the relative time periods since the adoption of the policy.

Illustrative Example To complement the estimation procedure above consider the following example. Let there be two economies n_1 and n_2 such that n_1 is treated at time $IT = 2$ and n_2 is treated at time $IT = 4$. Then, the average treatment effect τ for each period is given by,

$$\tau = \Big[0, \tau_{n1,2}, \dots \tau_{n1,T}, 0 \dots \tau_{n2,4}, \tau_{n2,5}, \dots \tau_{n2,T}\Big]'$$

Therefore, the effect at each horizon (h) is computed according to the following,

$$\tau_h = \frac{1}{|\Omega_{1,h}|} \sum_{i=1}^{N \in \Omega_{1,h}} \tau_{ih}$$

Where, $\Omega_{1,h}$ is all the observations such that inflation targeting is implemented in period $h = t - IT^I$ after the introduction of IT and $h = \{0, 1, 2, 3, \dots\}$. Finally, this implies that $\tau_1 = \frac{1}{2}(\tau_{n1,3} + \tau_{n2,5})$. Since the computation of the treatment effect relies on the imputation method, there is no requirement for the normalization of $t = -1$. The treatment effects are estimated based on the differences between treated and not-yet-treated units, with weights assigned dynamically, but without forcing the pre-treatment period $t = -1$ to serve as the reference point.

The theoretical framework provides clear implications for τ_h. τ_h is the empirical counterpart for ω_s. Following the announcement of the policy, $\tau_{h=0}$ is expected to be negative. Furthermore, the treatment effect should remain negative until inflation reaches its steady-state level after the policy announcement. Therefore, under the null hypothesis, which posits that inflation expectations should adjust downward after the introduction of IT, $\tau_h < 0$, where h represents the horizons following the policy announcement. The point at which $\tau_h = 0$ is expected to coincide with the policy's implementation, as all adjustments in observed inflation and inflation expectations should occur at the time of the announcement.

This hypothesis rests on some strong assumptions. First, for convergence to the Rational Expectations Equilibrium (REE), it assumes that $\delta_i = 0$. Second, κ is assumed to be constant across countries and over time. This simplifies the model by disregarding the nuances of how policy introduction may influence the speed of learning among agents in different economies, allowing for the identification of the treatment effect. If κ were allowed to vary across time or countries, it would be unclear whether the observed changes stem from shifts in the mean of agents' priors or from changes in the variance[8].

[8] In section 5.4, I relax the constant gain assumption to make it state dependent on the prevailing level of inflation.

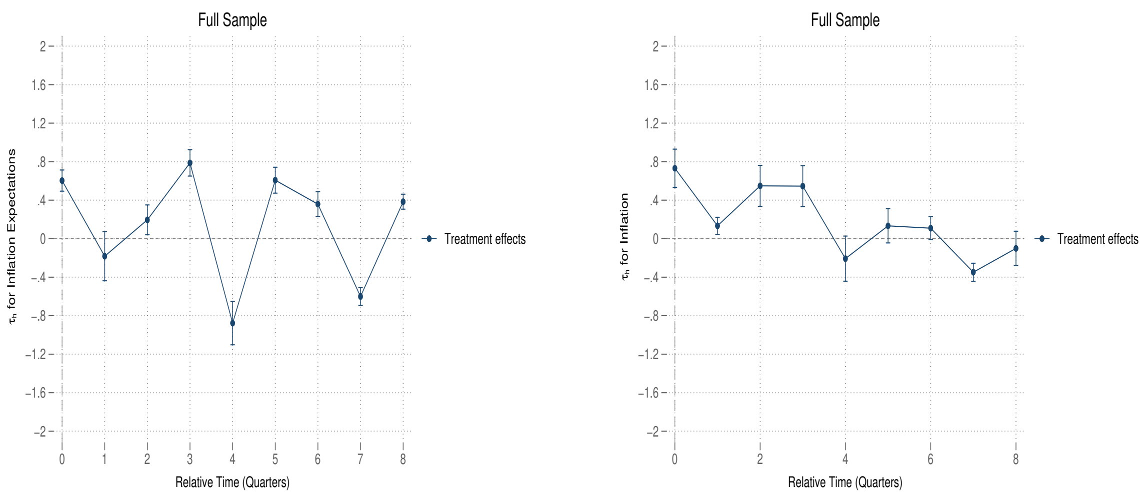
5.2 Announcement when agents are learning

Figure 6 summarizes the event-time responses to IT announcements for (a) inflation expectations and (b) realized inflation. Throughout, τ_h denotes the average treatment effect at horizon h quarters relative to the announcement, computed under staggered adoption using not-yet-treated countries as the comparison group.

Fact I: *Inflation Expectations and Realized Inflation do not respond to the announcement of Inflation Targeting*

Figure 6: Responses around the IT announcement: Expectations and Inflation

(a) Inflation expectations (b) Realized inflation



Note: Panel (a) plots the estimated response of inflation expectations, and Panel (b) plots the estimated response of realized inflation, around the inflation-targeting announcement. The blue dots represent the point estimates τ_h of the average treatment effect and the vertical lines depict 95% confidence intervals. The x-axis reports event time (horizon h) in quarters following the announcement; the figure shows $h = 0, \ldots, 8$, corresponding to two years after the announcement.

Inflation expectations Panel (a) indicates little evidence of an announcement effect on inflation expectations. The estimated coefficients vary in sign across horizons but remain economically small and tightly centered around zero—on the order of about one-half percentage point. Overall, the pattern provides no indication of a discrete shift in expectations at the time of the announced regime change. Precision is weaker in the announcement design because pre-announcement support is limited for a subset of early adopters: for some countries the announcement occurs close to the start of the sample, leaving few (or no) usable pre-period observations within the event window. As a result, countries such as Chile and Israel are dropped from the announcement-based specification, reducing the effective sample size and widening confidence intervals at some horizons.

Realized inflation I next assess whether realized inflation responds at the announcement using the following dynamic specification:

$$\pi_{it} = \beta\pi_{it-1} + \delta\pi^e_{it-1} + D_{it}\tau_{it} + \epsilon_{it}. \tag{36}$$

Equation (36) controls for inflation persistence and for the pre-existing comovement between inflation and survey expectations, while τ_h captures the incremental change in inflation at event time h associated with the announcement.[9]

Panel (b) reports the corresponding event-time effects for realized inflation. As with expectations, the coefficients do not display a systematic pattern: estimates are small, alternate in sign, and remain close to zero over the event window. Consistent with the announcement being pre-determined relative to the sample window for some adopters, statistical power is also more limited in this regression for the same reason as in Panel (a): thin pre-announcement histories for a subset of countries reduce precision and can widen confidence intervals. Overall, the announcement-date analysis yields *no evidence that either inflation expectations or realized inflation adjust in a quantitatively meaningful way at the time of announcement.*

5.3 Implementation when agents are learning

While the theoretical model in Section 2 suggests that agents adjust their expectations upon the policy announcement, it is plausible that a lack of credibility prevents the announcement from having a significant effect in the data. However, once the central bank implements IT—where inflation is expected to be anchored to the target in every period—agents may begin to respond to the policy's introduction. Consequently, I now use the implementation date as the event period to assess whether inflation expectations and observed inflation adjust. The regression specifications for inflation expectations and inflation remain consistent with those in equations (35) and (36).

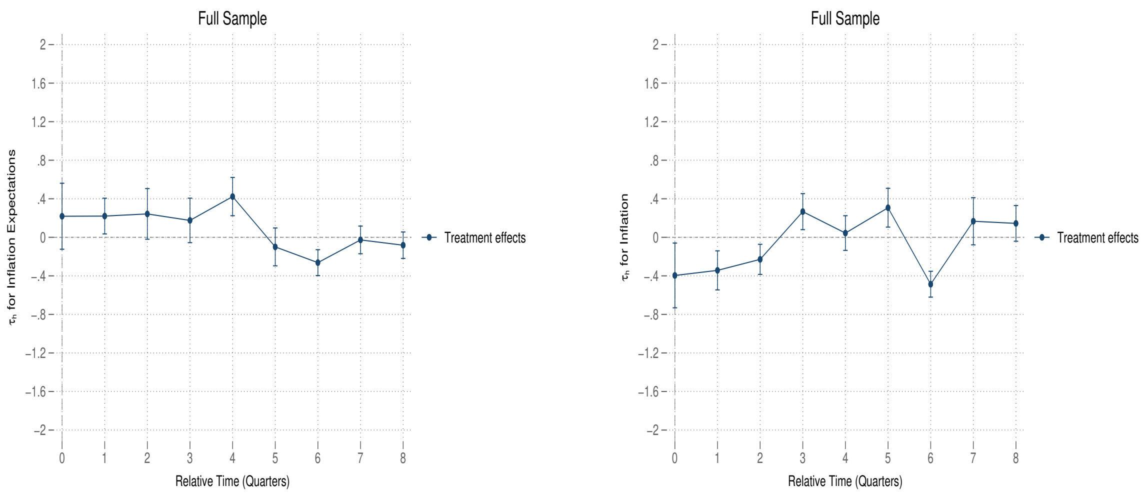
[9] As in Borusyak et al. (2024), the estimator is implemented as an event-study under staggered adoption. Note that formal asymptotic results for dynamic panel specifications with lagged dependent variables are not provided in their analysis.

Fact II: *Inflation Expectations do not respond to the implementation of IT.*

Figure 7 reports event-study estimates around IT implementation. Panel (a) provides little evidence of an on-impact shift in inflation expectations: the estimated coefficients oscillate around zero and are generally imprecisely estimated. At longer horizons (one-year after implementation) the point estimates trend downward, consistent with a modest decline in expected inflation, but the corresponding confidence intervals include zero throughout, so these effects are not statistically distinguishable from no change.

Figure 7: Responses around IT implementation: Expectations and Inflation

(a) Inflation expectations (b) Inflation



Note: Panel (a) plots the estimated response of inflation expectations and Panel (b) plots the estimated response of realized inflation around the implementation of inflation targeting. The blue dots report the point estimates τ_h of the average treatment effect and the vertical lines depict 95% confidence intervals. The x-axis reports event time (horizon h) in quarters relative to implementation; the figure shows $h = 0, \dots, 8$, corresponding to two years after implementation.

Fact III: *Realized Inflation declines following the implementation of IT.*

Panel (b) indicates a decline in realized inflation in the first three quarters after implementation. The magnitude is economically small but statistically significant. Taken together, these patterns are consistent with a setting in which expectations do not adjust sharply at the time of adoption, while realized inflation falls after implementation; as a consequence, forecast errors become negative and subsequent revisions move expectations down. The implied adjustment in the level of expectations is modest relative to the pre-IT inflation environment in most countries.

Relative to the model benchmark, these estimates are, if anything, even more muted: even under adaptive learning the model delivers a systematic post-regime adjustment in expectations, whereas the data exhibit little evidence of a quantitatively meaningful drift. Interpreted through the lens of the updating equation, this suggests that expectation updating in the data may be slower and less tightly linked to the regime transition than in the stylized learning mechanism. In turn, this pattern is consistent with a limited role for communication and perceived credibility at the adoption date in moving the level of expectations on impact, with any adjustment occurring primarily through the gradual incorporation of realized inflation outcomes under the new framework.

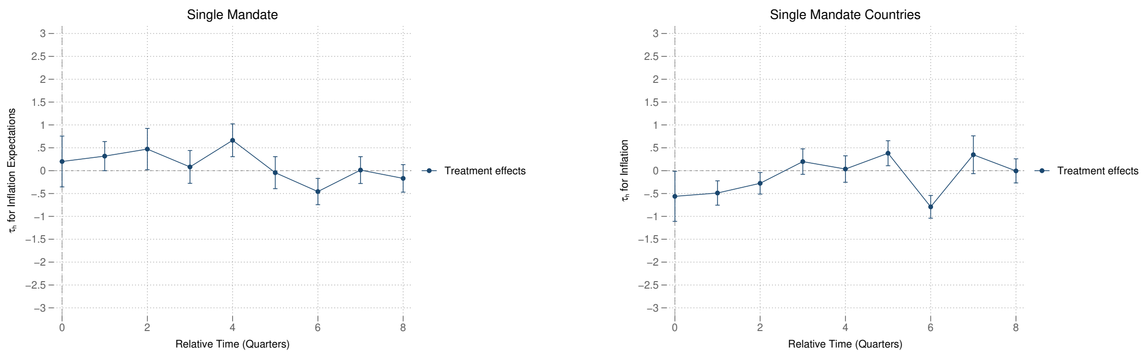
The literature often distinguishes *full* inflation targeters—economies in which price stability is the sole or primary statutory objective—from *flexible* inflation targeters, where inflation stabilization is pursued alongside other objectives (e.g., employment).[10]

Figure 8 reports event-study estimates for the subsample of full inflation targeters around the implementation date. Panel (a) shows little evidence of the introduction of IT on inflation expectations. Panel (b) shows that realized inflation declines in the single-mandate subsample in a pattern closely aligned with the pooled estimates, with somewhat larger point estimates at intermediate horizons. Taken together, these results indicate that the aggregate disinflation dynamics are driven largely by the single-mandate group, with the pooled estimates largely reflecting their response.

[10] If you want a citation here, you can cite your institutional classification source or a standard IT overview; otherwise leave it descriptive.

Figure 8: Full Inflation Targeters (Single Mandate)

(a) Inflation expectations (b) Realized inflation



Note: Panel (a) plots the estimated response of inflation expectations and Panel (b) plots the estimated response of realized inflation for the subsample of full inflation targeters (single mandate). Dots report the event-time estimates τ_h and vertical lines denote 95% confidence intervals. The x-axis reports event time in quarters h relative to the implementation date; the figure shows $h = 0, \ldots, 8$, corresponding to two years after implementation.

Frameworks appear to be associated with larger inflation adjustments in environments where price stability is less diluted by competing objectives, even though expectations remain largely unresponsive. I do not view this split as isolating a unique causal channel, but it provides a useful benchmark for how institutional design correlates with the macro response to IT.

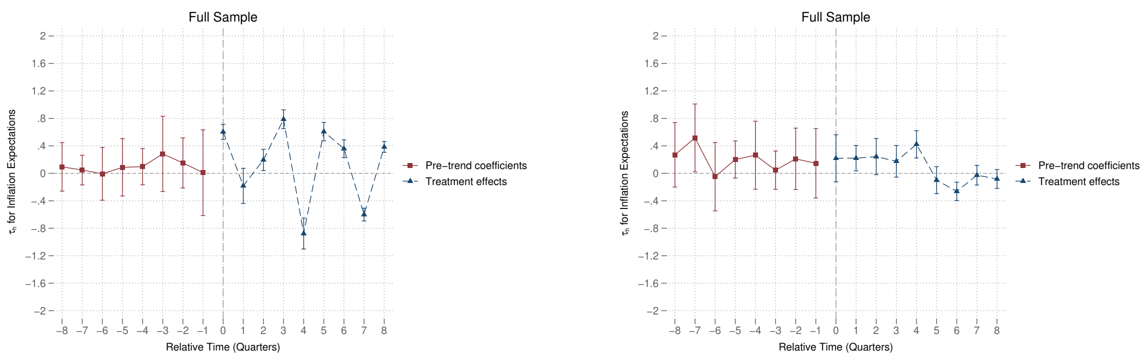
5.3.1 A note on Identification

After describing the estimator, it is useful to clarify the conditions under which the estimated event-time coefficients can be interpreted as the effect of adopting inflation targeting. The empirical design is a staggered-adoption event study that compares countries that adopt IT at date $t = IT^A/IT^I$ to countries that are not yet treated at the same calendar time. Identification requires that, absent adoption, treated and not-yet-treated countries would have followed similar paths for the outcomes of interest over the event window (that is, parallel trends in untreated potential outcomes). In this setting, parallel trends also rules out economically meaningful anticipation: if forecasters systematically adjust expectations before $t = IT^A/IT^I$, the event-study would display differential pre-treatment dynamics.

To make this restriction empirically relevant in a forecast-based dataset, I anchor event time to the IT announcement date, defined as the earliest explicit discussion of a shift toward IT (or a closely related rule-based framework) in policy committee records; when such documentation is unavailable, I use the earliest date documented in the historical and empirical literature as a proxy. This timing convention deliberately moves $t = IT^A$ to the earliest plausible information date, so that the pre-event coefficients provide a conservative test for both differential pre-trends and anticipation. Consistent with the identifying assumption, the event-study estimates at negative horizons are close to zero and jointly insignificant, indicating no systematic differential dynamics prior to the announcement and supporting the use of not-yet-treated countries as a credible counterfactual.

Figure 9: Pre-trends for Inflation Expectations

(a) Around the announcement (b) Around implementation



Note: The blue dots represent the point estimates τ_h of the event-time effects, while the vertical lines depict 95% confidence intervals. The x-axis measures event time (h) relative to the introduction of the policy. Panels (a) and (b) use the announcement and implementation dates, respectively, to define event time.

Figure 9 reports the standard pre-trend diagnostic. In both panels, the estimates in the pre-event window are close to zero and precisely estimated, with confidence intervals tightly centered at zero. This pattern is particularly informative for the implementation design because inflation targeting is typically pre-announced: any advance updating by forecasters would appear as non-zero coefficients prior to implementation.

A separate concern is that adoption may be bundled with other policy or institutional reforms. Countries often introduce inflation targeting as part of broader stabilization packages—fiscal consolidation, exchange-rate regime changes, or reforms to the monetary-policy framework—that could affect expectations through channels unrelated to the targeting regime. Importantly, if such coincident reforms were driving the results, one would expect to see systematic forecast adjustments either at the announcement, at implementation, or around the timing of the associated reforms, potentially at different dates across countries. The survey evidence provides little support for this pattern: professional forecasts do not display sharp on-impact revisions at the regime transition, and the robustness exercises do not reveal economically meaningful breaks when the event timing is shifted to plausible alternative reform dates. Together, these facts narrow the set of confounding narratives consistent with the estimated dynamics.

5.4 Unit and Time Varying Gain

Do forecasters update differently around IT? A potential concern for the empirical design is that the *speed of expectation updating* may itself change around the introduction of inflation targeting, mechanically altering the mapping from realized inflation to survey expectations. To assess this channel, I estimate country-specific break regressions that relate forecast revisions to lagged inflation surprises around IT dates. Let π^e_{it} denote one-year-ahead inflation expectations and π_{it} realized inflation. Define the forecast revision $\Delta\pi^e_{it} \equiv \pi^e_{it} - \pi^e_{it-1}$ and the lagged forecast error $FE_{it} \equiv \pi_{it-1} - \pi^e_{it-1}$. For each country i, I estimate

$$\Delta\pi^e_{it} = \alpha_i + \alpha_i^B \mathbb{1}\{t \geq IT^I\} + \kappa_i FE_{it} + \Delta\kappa_i \big(FE_{it} \times \mathbb{1}\{t \geq IT^I\}\big) + u_{it}, \qquad (37)$$

where t_i^* is set to either the IT announcement date or the IT implementation date. In (37), κ_i is the pre-break *gain*—the sensitivity of forecast revisions to inflation surprises—and $\Delta\kappa_i$ captures a discrete shift in this sensitivity after IT^I, so that the post-break gain equals $\kappa_i + \Delta\kappa_i$. I report Newey–West standard errors and test $H_0 : \Delta\kappa_i = 0$.

Appendix Tables F.11 and F.12 report the estimated pre- and post-break gains around IT announcements and implementation dates, respectively, together with $\Delta\kappa_i$ and the corresponding p-values. Across most countries, I do not reject stability of the gain at either date. While a small subset of countries exhibits statistically detectable changes in $\Delta\kappa_i$, there is no evidence of a systematic shift in updating behavior common across the sample. Taken together, these results suggest that discrete breaks in forecast updating at IT dates are unlikely to account for the baseline findings.

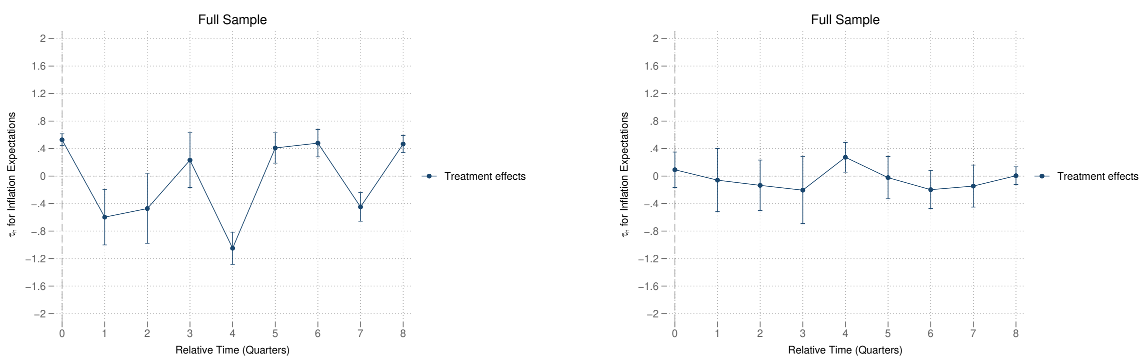
Allowing for gradual and state-dependent updating. The break-regression evidence does not rule out more gradual or state-dependent changes in updating. In the preceding section, I imposed the simplifying restriction that the gain is constant over time and common across countries. Recent work suggests that updating may drift and vary with the inflation environment (e.g., Carvalho et al., 2023; Pfäuti, 2023). Motivated by this evidence, I relax the constant-gain restriction by allowing the gain to depend on the inflation state. Specifically, I estimate

$$\pi_{it}^{e} = \pi_{it-1}^{e} + (\beta + \gamma\,\pi_{it})\big(\pi_{it-1} - \pi_{it-1}^{e}\big) + D_{it}\tau_{it} + \epsilon_{it}, \tag{38}$$

so that the responsiveness of forecast revisions to inflation surprises varies systematically with the inflation level.[11] Figure 10 reports the event-study estimates obtained from (38). Allowing for state-dependent updating does not materially alter the results: expectations continue to display little systematic response at announcement, and the qualitative conclusions are unchanged when the event time is defined relative to implementation.

Figure 10: Inflation Expectations with a State-Dependent Gain

(a) Around the announcement (b) Around implementation



Note: Points report event-time estimates τ_h; vertical lines are 95% confidence intervals. The horizontal axis indexes horizons h relative to the event date.

The empirical evidence raises a natural question: why do inflation expectations exhibit so little adjustment at the introduction of inflation targeting? While the design is not intended to identify a structural measure of credibility, the pattern is consistent with environments in which the regime change is not fully internalized on impact and beliefs adjust primarily through subsequent inflation realizations.

[11]This formulation captures state-dependent updating without parameterizing a fully unrestricted country- and time-specific gain, which would be difficult to separately identify from the event-time treatment effects.

This interpretation aligns with theoretical work that links imperfectly anchored expectations to limited credibility and gradual learning. For example, Gibbs and Kulish (2017) study disinflations in a framework where private agents combine forward-looking forecasting with adaptive elements, and where imperfect credibility is captured by incomplete reliance on the new policy regime. A key implication is delayed adjustment of expectations: even when the policy rule changes, expectations need not re-center immediately and instead drift as realized inflation under the new regime provides evidence about the policy environment. While their focus is disinflation episodes rather than cross-country regime adoption, the mechanism provides a natural lens for interpreting the muted expectation response documented here.

6 Robustness Checks

The baseline estimates deliver a striking pattern: inflation expectations display little systematic adjustment around IT, even as inflation dynamics change. This section reports robustness exercises designed to assess whether the main findings are sensitive to plausible confounds. I focus on three targeted checks that speak to the leading identification concerns in this setting: state dependence (controlling for lagged inflation), proximity to the nominal anchor (allowing effects to vary with distance from the target), and the information/credibility environment (conditioning on central-bank transparency). Additional robustness checks are reported in the Appendix and leave the qualitative conclusions unchanged.

6.1 Past Inflation

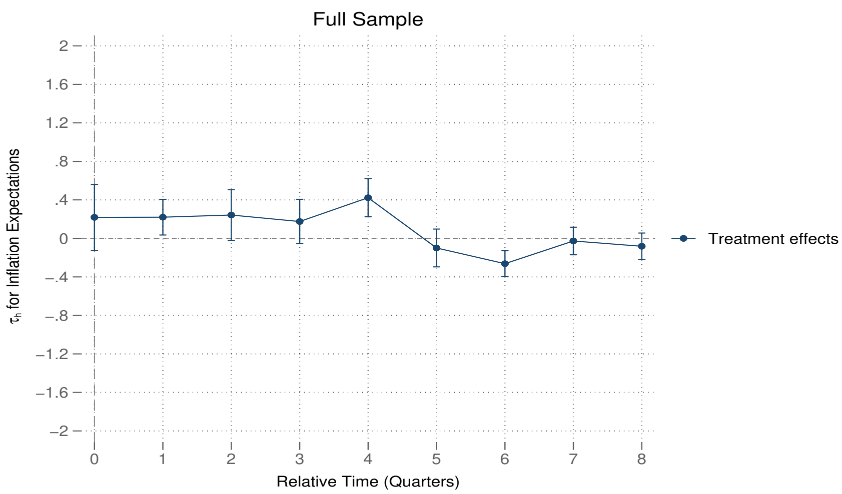
One possible confounding factor that could explain the lack of effect in the baseline results is the level of previous inflation. If inflation was consistently high before the policy announcement, inflation expectations might be anchored to the high level of inflation and thus less responsive to the announcement. To address this concern, I run the following specification to ensure that the treatment effect is not being muted due to the omission of previous inflation as a control.

$$\pi^e_{it} = \pi^e_{it-1} + \kappa(\pi_{it-1} - \pi^e_{it-1}) + \gamma\pi_{it-1} + \epsilon_{it} \tag{39}$$

The variables in this specification are the same as before with the exception of γ

which is the coefficient on past inflation. Figure 11 presents the results for the new specification. As before, the blue dots are the point estimates and the vertical lines are the confidence bands surrounding each estimate. After controlling for the level of previous inflation, there is no change in the baseline result of the response of inflation expectations. Therefore, the initial result remains robust.

Figure 11: Inflation Expectations around Implementation



Note: The blue dots represent the point estimates τ_h of the average treatment effect, while the vertical lines depict the confidence intervals for each estimate. The x-axis measures the horizon (h) following the introduction of the policy. The confidence interval is measured at 95%.

6.2 Distance from the first Inflation Target

Several central banks introduced inflation targeting cautiously, often choosing an initial target that was deliberately achievable to reduce the risk of a sharp contraction during the transition.[12] This implies that the level of the first target is potentially endogenous: it may reflect contemporaneous inflation conditions and policymakers' stabilization constraints, both of which could independently shape realized inflation and the formation of expectations.

To address this concern, I implement a robustness check that controls for initial target distance. Specifically, I include as a control the gap between the last observed inflation rate prior to adoption and the first announced inflation target, $\text{TargetGap}_i \equiv$

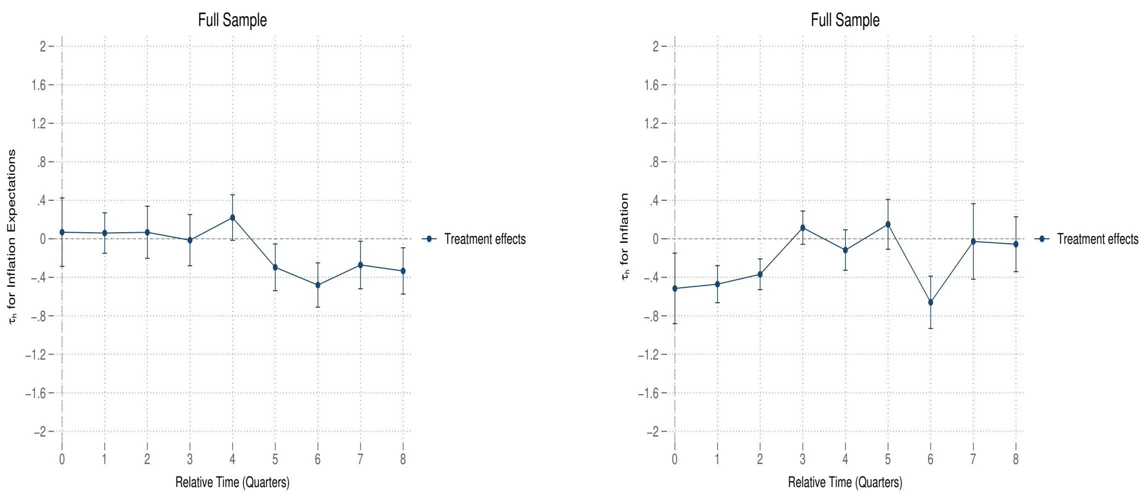
[12] Duggal and Rojas argue that early targets were sometimes set with an eye toward feasibility during disinflation episodes.

$\pi_{i,t_i^*-1} - \pi_{i,0}^{\text{target}}$, such that the estimated event-time effects are identified off variation in IT adoption holding fixed how "ambitious" the initial nominal anchor was relative to prevailing inflation. To address this, I run the following regression,

$$\pi_{it}^e = \pi_{it-1}^e + \kappa(\pi_{it-1} - \pi_{it-1}^e) + \gamma \text{Target Gap}_{it} + \epsilon_{it} \tag{40}$$

Figure 12: Inflation and Inflation Expectations around Implementation

(a) Inflation Expectations (b) Inflation



Note: In each panel, the blue dots represent the point estimates τ_h of the average treatment effect, while the vertical lines depict the 95% confidence intervals. The x-axis measures the horizon (h) following the implementation of the policy.

Figure 12 shows the event-study estimates when conditioning on the initial "target gap," defined as the difference between inflation just prior to adoption and the first announced inflation target. Allowing for heterogeneity in the initial disinflation challenge does not change the conclusion: inflation expectations exhibit no quantitatively meaningful adjustment around adoption. The baseline results are therefore robust to controlling for the initial distance from the nominal anchor. This addresses the concern that IT adopters with larger initial gaps may display different dynamics mechanically, independent of any change in expectation formation.

6.3 Central Bank Transparency

Credibility plays a crucial role in shaping inflation expectations. A clear example of this is the experience of many Latin American economies prior to the establishment of independent central banks. When monetary policy remained under government control, these countries often faced credibility crises that led to hyperinflationary cycles. However, after the central banks gained independence, many of these economies experienced a sustained decline in inflation rates.

While there are no direct measures available to quantify the credibility of central banks, an index of transparency and independence developed by Dincer and Eichengreen (2013) serves as a useful proxy. This paper utilizes this index to approximate central bank credibility. The reason is that greater transparency and independence provide central banks with more effective control over monetary policy and the ability to achieve their objectives, thereby making the index a good proxy for credibility. To analyze the impact of central bank transparency on inflation expectations, the following regression is estimated:

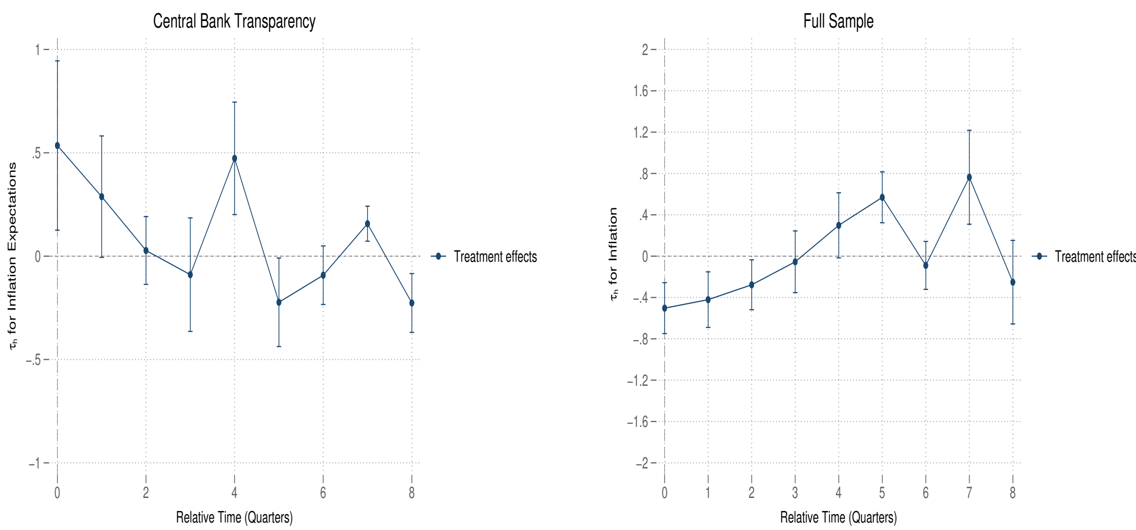
$$\pi^e_{it} = \bar{\alpha} + \pi^e_{it-1} + \kappa(y_{it} - \pi^e_{it-1}) + \gamma_3 TR + \epsilon_{it} \tag{41}$$

In this equation, the variables are as previously defined, with the addition of TR, which captures the level of central bank transparency. The dataset for central bank transparency spans the years 1998-2019, though it excludes countries that are part of the European Monetary Union (EMU), as well as Paraguay and Uruguay. A combined index is available for the EMU, but since different countries implemented inflation targeting at different times, the EMU data is excluded from this analysis. Due to the limited availability of transparency data, the analysis focuses on a smaller subset of countries: Hungary, India, Japan, Korea, Mexico, Norway, the Philippines, South Africa, Switzerland, Thailand, and the United States.

Figure 13 reports the event-study estimates after controlling for central bank transparency. The pattern mirrors the baseline results: professional-forecaster inflation expectations display no statistically meaningful response following the policy announcement once transparency is accounted for. Restricting the sample to countries with available transparency data reduces the number of treated observations and therefore widens confidence intervals. In this smaller sample, the event-time estimates for inflation expectations remain centered close to zero and do not display a systematic adjustment around the announcement. While the estimates are less precise than in the baseline specification, the pattern of results is qualitatively unchanged, suggesting that the baseline finding is not driven by the omission of central-bank transparency. At the same time, the wider confidence bands imply limited power to detect modest effects in this subsample.

Figure 13: Controlling for Central Bank Transparency: Expectations and Inflation (Implementation)

(a) Inflation expectations (b) Realized inflation



Note: The blue dots represent the point estimates τ_h of the average treatment effect, while the vertical lines depict the corresponding 95% confidence intervals. The x-axis measures the horizon (h) following the policy announcement. The variable for transparency has been taken from Dincer and Eichengreen (2013).

7 Conclusion

This paper studies how the *level* of inflation expectations responds to a monetary-policy regime change. Motivated by the prominent role of expectations in modern monetary transmission, I examine whether agents revise inflation expectations toward the newly announced inflation objective, and how the resulting dynamics compare with the predictions of a standard benchmark model.

I pair a New Keynesian model with trend inflation and an explicit regime transition with cross-country survey evidence. The model delivers a simple implication. Under full credibility and commitment, once the new regime and its announced inflation objective are common knowledge, inflation expectations adjust promptly toward the level implied by that objective. Under adaptive learning, expectations adjust gradually, but in a systematic way. Empirically, I exploit the staggered adoption of inflation targeting in an imputation-based event-study design that traces the dynamic responses of inflation expectations and realized inflation.

The estimates reveal a clear asymmetry between expectations and realized inflation. Across specifications, inflation expectations show little systematic adjustment at either the announcement or the implementation of inflation targeting. In contrast, realized inflation declines following adoption, with larger reductions in economies operating under a single price-stability mandate. These patterns are robust to controlling for the information and credibility environment (including central bank transparency) and to conditioning on initial conditions such as the distance from the first announced target. Overall, the evidence offers limited support for an on-impact re-anchoring of inflation expectations of the type implied by full-information, fully credible regime transitions.

A concern is that the muted level response could reflect a change in the gain—the responsiveness of forecasts to new information—rather than stable beliefs about the long-run inflation objective. To address this, I use a simple diagnostic: I examine whether the sensitivity of forecast revisions to forecast errors. In standard adaptive learning models, this sensitivity corresponds to gain, capturing how aggressively forecasters revise beliefs in response to surprises. I find little evidence of systematic breaks in this gain across countries. This makes it unlikely that the near-zero level response reflects offsetting changes in learning speeds.

Overall, the results indicate that improved inflation outcomes following IT adoption are not matched by a contemporaneous shift in the level of inflation expectations. Survey expectations do not exhibit a systematic re-anchoring at the regime change, even in settings where inflation declines thereafter. The evidence instead points to expectation adjustment occurring with a lag, as agents revise beliefs only once the lower-inflation objective is reflected in realized outcomes. For policy, the findings suggest that announcements alone are unlikely to move beliefs; credibility is instead built through the subsequent inflation path.

A remaining identification concern is that IT adoption may be bundled with other stabilization and institutional reforms that also affect inflation and expectations. An important limitation is that these concurrent changes are difficult to measure uniformly at a quarterly frequency across countries. While the absence of a systematic re-leveling in expectations reduces the scope for many announcement-driven confounds, future work that combines richer cross-country reform measures with higher-frequency or narrative identification could further disentangle the contribution of monetary frameworks from concurrent changes.

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Appendices

A List of IT Countries

Table A.1: List of IT countries

Name of Country	Start Year	Announcement Year
Argentina	2016Q3	2015Q4
Austria	2003Q2	1998Q4
Belgium	2003Q2	1998Q4
Brazil	1999Q2	1995Q4
Chile	1999Q3	1990Q3
Colombia	1999Q1	1993Q1
Czech Republic	1999Q2	1997Q4
Finland	1995Q1	1993Q1
Germany	2003Q2	1998Q4
Hungary	2001Q2	1998Q4
India	2016Q3	2015Q1
Ireland	2003Q2	1998Q4
Israel	1997Q2	1992Q1
Italy	2003Q2	1998Q4
Japan	2013Q1	2012Q1
Korea	1999Q1	1998Q2
Mexico	2001Q1	1995Q1
Netherlands	2003Q2	1998Q4
Norway	2001Q1	1999Q2
Paraguay	2011Q2	2004Q2
Peru	2002Q1	1994Q1
Philippines	2002Q1	2000Q1
Poland	2003Q1	1998Q3
Russia	2014Q1	2013Q3
South Africa	2000Q1	1999Q3
Spain	1997Q1	1994Q4
Switzerland	2000Q1	1999Q4
Thailand	2000Q2	2000Q1
Turkey	2006Q1	2002Q1
Ukraine	2016Q1	2015Q3
United States	2012Q1	2008Q4
Uruguay	2007Q3	2004Q4

Source: Central Bank websites and IMF. These are the countries used in this study.

B Inflation Targeting

A country is called an Inflation Targeter (Hammond et al. (2012)) when the following conditions are met.

1. Price stability is recognised as the explicit goal of monetary policy.
2. There is a public announcement of a quantitative target for inflation.
3. Monetary policy is based on a wide set of information, including an inflation forecast.
4. Transparency
5. Accountability mechanisms.

C Country Classification

The following table details three different classifications for each country. First, whether each country is advanced or developing. Second, whether each country has a single or dual mandate. Third, whether the country has experienced an episode of hyperinflation.

The classification of a country as developing or advanced is based on the UN country classification. The distinction between countries who have single mandates and those with dual mandates (or flexible targets) is based on the mandates available on the central bank websites. A country has been classified as one with hyper inflationary episodes if it has ever had inflation greater than 50%, in the sample period.

Note: The final data used for the event study analysis excludes the countries that have had episodes of hyperinflation in the period covered by the data set.

Table C.2: List of IT countries

Name of Country	Development Status	Mandate	Hyper Inflation
Argentina	Developing	No-mandate	Yes
Austria	Advanced	Dual	No
Belgium	Advanced	Dual	No
Brazil	Developing	Single	Yes
Chile	Developing	Single	No
Colombia	Developing	Single	No
Czech Republic	Developing	Single	Yes
Finland	Advanced	Dual	No
Germany	Advanced	Dual	No
Hungary	Advanced	Single	No
India	Developing	Single	No
Ireland	Advanced	Dual	No
Israel	Developing	Single	No
Italy	Advanced	Dual	No
Japan	Advanced	Single	No
Korea	Developing	Single	No
Mexico	Developing	Single	No
Netherlands	Advanced	Dual	No
Norway	Advanced	Single	No
Paraguay	Developing	Single	No
Peru	Developing	Single	Yes
Philippines	Developing	Single	No
Poland	Advanced	Single	Yes
Russia	Developing	Single	Yes
South Africa	Developing	Single	No
Spain	Advanced	Dual	No
Switzerland	Advanced	Dual	No
Thailand	Developing	Single	No
Turkey	Developing	Single	Yes
Ukraine	Developing	Single	Yes
United States	Advanced	Dual	No
Uruguay	Developing	Single	Yes

Source: Central Bank websites, UN classification.

D Summary Statistics

D.1 Implementation

Table D.3: Inflation Expectations: Mean, Volatility, and Persistence

	Pre			Post		
Country Name	Mean	SD	ρ	Mean	SD	ρ
Argentina	18.414	18.677	.876	28.227	4.351	.624
Austria	2.381	.921	.959	1.924	.395	.763
Belgium	2.231	.630	.913	1.887	.620	.788
Brazil	526.396	632.028	.846	6.073	1.648	.764
Chile	1.026	4.397	.909	3.480	.828	.753
Colombia	22.052	2.631	.957	6.151	3.829	.989
Czech Republic	13.110	6.636	.895	2.951	1.649	.929
Finland	3.604	.795	.443	1.752	.659	.844
Germany	2.399	.947	.961	1.644	.468	.872
Hungary	2.045	6.965	.933	4.507	2.123	.959
India	7.154	2.095	.887	5.086	.375	.568
Ireland	2.963	.788	.844	1.882	1.473	.869
Israel	1.530	2.912	-.102	3.004	2.046	.927
Italy	3.721	1.598	.949	1.820	.703	.912
Japan	.477	.847	.944	.769	.459	.866
Korea	6.934	1.565	.838	3.340	1.296	.922
Mexico	18.244	9.470	.745	4.915	1.399	.935
Netherlands	2.679	.569	.849	1.769	.513	.874
Norway	2.533	.512	.780	2.135	.386	.715
Paraguay	11.286	4.011	.631	4.968	.956	.775
Peru	4.407	.711	.455	2.920	.548	.541
Philippines	8.746	2.425	.724	4.536	1.271	.816
Poland	23.268	19.475	.936	2.452	1.099	.869
Russia	13.131	295.569	.858	7.995	3.012	.902
South Africa	9.892	2.469	.954	6.193	1.190	.806
Spain	5.061	.929	.857	2.341	.948	.908
Switzerland	2.123	1.404	.961	.765	.569	.899

Thailand	6.243	1.551	.680	2.708	1.102	.760
Turkey	59.746	25.909	.839	8.614	1.953	.804
Ukraine	12.823	5.768	.822	13.852	5.047	.771
United States	2.741	.623	.898	2.068	.281	.736
Uruguay	25.042	21.795	.983	7.768	.826	.661

Note: ρ is corr$(, t-1)$ within country.

Table D.4: Realised Inflation: Mean, Volatility, and Persistence

	Pre			Post		
Country Name	Mean	SD	ρ	Mean	SD	ρ
Argentina	15.304	29.149	.957	32.193	1.265	.842
Austria	2.249	1.072	.930	1.873	.807	.838
Belgium	2.000	.709	.781	1.924	1.229	.839
Brazil	715.430	1091.519	.880	6.344	2.663	.889
Chile	1.036	5.246	.981	3.166	1.946	.855
Colombia	22.211	3.922	.947	5.149	2.190	.936
Czech Republic	1.564	4.797	.803	2.239	1.602	.864
Finland	2.420	1.169	.884	1.397	1.149	.899
Germany	2.244	1.503	.927	1.450	.697	.829
Hungary	19.594	7.665	.957	3.816	2.413	.924
India	7.684	3.400	.860	4.953	2.305	.749
Ireland	2.982	1.450	.908	1.205	2.283	.922
Israel	2.815	1.310	.273	.457	1.000	.209
Italy	3.484	1.464	.974	1.514	1.070	.919
Japan	.199	1.079	.864	.859	1.020	.773
Korea	5.719	1.860	.661	2.348	1.242	.888
Mexico	18.323	1.783	.907	4.278	1.018	.837
Netherlands	2.616	.736	.887	1.608	.755	.807
Norway	2.334	.679	.741	2.015	1.059	.653
Paraguay	1.378	5.438	.865	3.799	1.374	.735
Peru	91.549	412.786	.879	2.723	1.363	.853
Philippines	7.761	3.803	.888	3.740	2.016	.872

Table D.4: Realised Inflation: Mean, Volatility, and Persistence

	Pre			Post		
Country Name	Mean	SD	ρ	Mean	SD	ρ
Poland	22.480	19.043	.990	2.061	1.656	.908
Russia	76.711	183.581	.960	6.746	4.509	.893
South Africa	9.091	3.534	.906	5.327	2.694	.884
Spain	4.748	.982	.876	2.070	1.461	.889
Switzerland	2.001	1.918	.974	.490	.877	.855
Thailand	4.646	2.420	.874	2.022	1.933	.824
Turkey	59.717	3.589	.949	9.617	3.485	.846
Ukraine	293.869	113.557	.801	1.281	3.593	.270
United States	2.598	1.083	.747	1.594	.708	.798
Uruguay	25.457	25.763	.992	7.957	1.078	.791

Note: ρ is corr$(, t-1)$ within country.

Table D.5: Forecast Errors: Mean, Volatility, and Persistence

	Pre			Post		
Country Name	Mean	SD	ρ	Mean	SD	ρ
Argentina	-7.618	16.540	.823	3.966	12.706	.842
Austria	-.243	.855	.847	-.051	.922	.806
Belgium	-.310	.751	.747	.037	1.375	.820
Brazil	228.018	995.561	.749	.271	2.544	.810
Chile	-1.399	1.742	.437	-.315	2.175	.822
Colombia	-.864	1.624	.636	-1.002	2.598	.936
Czech Republic	-2.546	7.704	.727	-.712	2.101	.854
Finland	-1.641	.968	.436	-.354	1.199	.853
Germany	-.383	.850	.654	-.194	.752	.796
Hungary	-1.898	4.671	.756	-.691	2.034	.822
India	.295	3.134	.771	-.133	2.572	.821
Ireland	-.026	1.339	.797	-.677	2.317	.856
Israel	-7.952	3.033	.129	-2.548	2.019	.767
Italy	-.468	1.064	.814	-.306	.950	.826

Table D.5: Forecast Errors: Mean, Volatility, and Persistence

	Pre			Post		
Country Name	Mean	SD	ρ	Mean	SD	ρ
Japan	-.403	.863	.723	.090	1.143	.794
Korea	-1.640	2.238	.683	-.992	1.652	.864
Mexico	-.166	9.974	.767	-.637	1.334	.828
Netherlands	-.130	.742	.778	-.161	.800	.780
Norway	-.279	.836	.704	-.120	1.147	.643
Paraguay	-1.294	4.949	.687	-1.169	1.568	.709
Peru	-2.312	1.515	.806	-.198	1.567	.809
Philippines	-1.884	2.893	.685	-.796	2.157	.803
Poland	-4.756	1.061	.611	-.391	1.517	.839
Russia	-5.800	172.739	.717	-1.249	4.639	.847
South Africa	-1.623	2.326	.647	-.866	2.809	.846
Spain	-.570	.836	.527	-.271	1.378	.801
Switzerland	-.604	.670	.600	-.275	.801	.782
Thailand	-1.689	3.626	.849	-.685	1.994	.733
Turkey	-.737	17.436	.650	1.003	3.238	.721
Ukraine	.189	12.366	.841	-3.571	5.603	.723
United States	-.195	1.207	.751	-.474	.703	.765
Uruguay	-3.985	7.173	.793	.188	1.392	.729

Note: ρ is $\text{corr}(, t-1)$ within country.

Table D.6: Mean Forecast Error Test (Newey–West)

Country Name	Pre-IT	Post-IT
Argentina	-7.618***	3.966
	(2.615)	(6.127)
Austria	-.243	-.051
	(.246)	(.189)
Belgium	-.310	.037
	(.201)	(.280)
Brazil	228.018	.271

	(304.813)	(.481)
Chile	-1.399***	-.315
	(.421)	(.413)
Colombia	-.864**	-1.002*
	(.409)	(.563)
Czech Republic	-2.546	-.712*
	(1.866)	(.389)
Finland	-1.641***	-.354
	(.292)	(.218)
Germany	-.383*	-.194
	(.202)	(.161)
Hungary	-1.898	-.691
	(1.249)	(.419)
India	.295	-.133
	(.563)	(1.252)
Ireland	-.026	-.677
	(.356)	(.524)
Israel	-7.952***	-2.548***
	(.671)	(.376)
Italy	-.468	-.306
	(.289)	(.208)
Japan	-.403**	.090
	(.159)	(.377)
Korea	-1.640**	-.992***
	(.617)	(.311)
Mexico	-.166	-.637**
	(2.851)	(.271)
Netherlands	-.130	-.161
	(.185)	(.176)
Norway	-.279	-.120
	(.203)	(.194)
Paraguay	-1.294	-1.169***
	(.956)	(.357)
Peru	-2.312**	-.198

	(.711)	(.310)
Philippines	-1.884**	-.796*
	(.702)	(.432)
Poland	-4.756**	-.391
	(1.852)	(.320)
Russia	-5.800	-1.249
	(33.676)	(1.703)
South Africa	-1.623***	-.866
	(.500)	(.568)
Spain	-.570*	-.271
	(.282)	(.247)
Switzerland	-.604***	-.275*
	(.146)	(.147)
Thailand	-1.689	-.685*
	(1.140)	(.345)
Turkey	-.737	1.003
	(3.855)	(.671)
Ukraine	.189	-3.571
	(2.888)	(2.244)
United States	-.195	-.474**
	(.217)	(.218)
Uruguay	-3.985**	.188
	(1.605)	(.327)

Note: Newey–West standard errors in parentheses.

D.2 Announcement

Table D.7: Inflation Expectations: Mean, Volatility, and Persistence

	Pre			Post		
Country Name	Mean	SD	ρ	Mean	SD	ρ
Argentina	17.993	18.794	.874	29.167	4.343	.602
Austria	2.925	.732	.969	1.848	.430	.775
Belgium	2.537	.586	.929	1.862	.575	.776

Table D.7: Inflation Expectations: Mean, Volatility, and Persistence

	Pre			Post		
Country Name	Mean	SD	ρ	Mean	SD	ρ
Brazil	526.396	632.028	.846	6.073	1.648	.764
Chile	.	.	.	5.234	3.746	.959
Colombia	26.806	.463	-.097	9.508	7.208	.996
Czech Republic	13.917	7.251	.891	3.428	2.398	.957
Finland	2.736	1.107	.862	1.736	.675	.849
Germany	2.879	.906	.964	1.651	.451	.847
Hungary	23.288	4.911	.809	5.305	3.101	.979
India	7.207	2.144	.888	5.461	.776	.867
Ireland	2.649	.381	.779	2.211	1.520	.885
Israel	.	.	.	4.360	3.651	.880
Italy	4.728	1.259	.866	1.902	.667	.909
Japan	.494	.864	.945	.689	.481	.879
Korea	6.899	1.628	.871	3.474	1.468	.925
Mexico	12.131	3.750	.929	8.847	8.620	.892
Netherlands	2.645	.498	.828	1.973	.674	.914
Norway	2.532	.567	.782	2.169	.388	.740
Paraguay	13.315	3.685	.302	6.520	2.483	.865
Peru	.	.	.	3.052	.702	.685
Philippines	9.188	2.446	.725	4.780	1.469	.808
Poland	33.522	19.522	.889	3.709	2.855	.979
Russia	133.052	298.487	.858	7.952	2.893	.902
South Africa	1.107	2.398	.948	6.205	1.178	.806
Spain	5.684	.799	.679	2.515	1.066	.931
Switzerland	2.223	1.393	.958	.762	.563	.898
Thailand	6.182	1.535	.735	2.776	1.256	.751
Turkey	72.058	17.348	.585	13.137	11.462	.907
Ukraine	12.370	5.166	.851	15.272	6.596	.665
United States	2.841	.573	.901	2.112	.412	.804
Uruguay	28.862	22.256	.981	7.690	.938	.715

Note: ρ is the within-country correlation between and $t-1$.

Table D.8: Realised Inflation: Mean, Volatility, and Persistence

	Pre			Post		
Country Name	Mean	SD	ρ	Mean	SD	ρ
Argentina	14.850	29.438	.961	31.895	9.248	.810
Austria	2.508	1.111	.931	1.858	.813	.853
Belgium	2.062	.704	.811	1.918	1.137	.830
Brazil	715.430	1091.519	.880	6.344	2.663	.889
Chile	.	.	.	5.179	4.520	.972
Colombia	27.867	2.272	.844	8.522	6.695	.990
Czech Republic	11.211	4.716	.796	2.633	2.408	.909
Finland	1.762	1.226	.910	1.467	1.190	.902
Germany	2.785	1.612	.917	1.421	.674	.820
Hungary	22.690	6.132	.906	4.543	3.029	.952
India	7.810	3.463	.860	5.171	1.966	.718
Ireland	2.277	.743	.812	1.838	2.472	.935
Israel	3.955	2.475	.300	.858	1.291	.517
Italy	4.113	1.481	.967	1.702	1.038	.927
Japan	.222	1.097	.866	.715	1.033	.791
Korea	5.837	1.690	.773	2.425	1.387	.841
Mexico	13.064	5.560	.894	8.490	9.550	.958
Netherlands	2.449	.610	.857	1.882	.938	.883
Norway	2.205	.647	.705	2.094	1.054	.668
Paraguay	12.156	5.582	.843	5.227	2.799	.810
Peru	314.555	769.017	.934	4.323	4.157	.978
Philippines	8.445	3.861	.871	3.834	1.957	.868
Poland	32.401	17.593	.982	2.874	2.640	.947
Russia	78.426	185.496	.960	6.718	4.326	.893
South Africa	9.486	3.215	.882	5.255	2.700	.885
Spain	5.231	.742	.776	2.237	1.510	.902
Switzerland	2.050	1.964	.975	.507	.874	.853
Thailand	4.730	2.399	.868	2.017	1.921	.823
Turkey	75.045	18.014	.827	11.383	7.449	.962
Ukraine	299.490	1142.399	.801	13.374	9.938	.884

Table D.8: Realised Inflation: Mean, Volatility, and Persistence

	Pre			Post		
Country Name	Mean	SD	ρ	Mean	SD	ρ
United States	2.783	.823	.666	1.592	1.063	.752
Uruguay	29.308	26.606	.992	7.635	1.331	.823

Note: ρ is $\text{corr}(, t-1)$ within country.

Table D.9: Forecast Errors: Mean, Volatility, and Persistence

	Pre			Post		
Country Name	Mean	SD	ρ	Mean	SD	ρ
Argentina	-7.807	16.729	.826	2.728	11.557	.827
Austria	-.564	.531	.719	.010	.946	.817
Belgium	-.599	.514	.554	.055	1.278	.813
Brazil	228.018	995.561	.749	.271	2.544	.810
Chile	.	.	.	-.605	2.116	.767
Colombia	-.441	1.134	.964	-.987	2.421	.906
Czech Republic	-2.707	8.298	.729	-.794	2.417	.840
Finland	-1.312	1.029	.681	-.269	1.201	.848
Germany	-.393	.937	.616	-.230	.746	.789
Hungary	-2.122	5.179	.737	-.762	2.161	.836
India	.357	3.217	.772	-.290	2.205	.793
Ireland	-.551	.739	.718	-.373	2.262	.853
Israel	.	.	.	-3.521	3.046	.783
Italy	-.908	1.110	.745	-.200	.898	.831
Japan	-.402	.880	.727	.026	1.090	.788
Korea	-1.518	2.004	.817	-1.049	1.771	.802
Mexico	-1.557	2.936	.453	-.357	5.955	.777
Netherlands	-.333	.548	.531	-.090	.827	.804
Norway	-.444	.800	.656	-.075	1.120	.647
Paraguay	-1.184	5.667	.620	-1.292	2.781	.800
Peru	.	.	.	-.385	1.666	.821
Philippines	-1.780	3.095	.705	-.946	2.177	.786

Table D.9: Forecast Errors: Mean, Volatility, and Persistence

	Pre			Post		
Country Name	Mean	SD	ρ	Mean	SD	ρ
Poland	-6.310	12.759	.594	-.835	2.023	.857
Russia	-52.029	174.704	.716	-1.233	4.450	.847
South Africa	-1.445	2.287	.624	-.950	2.827	.848
Spain	-.744	.869	.338	-.278	1.334	.797
Switzerland	-.681	.611	.531	-.255	.803	.781
Thailand	-1.537	3.574	.849	-.759	2.088	.742
Turkey	3.529	17.823	.586	-1.754	7.761	.799
Ukraine	-.181	12.160	.874	-1.899	8.465	.801
United States	-.110	.943	.693	-.520	1.251	.788
Uruguay	-4.599	7.703	.785	-.054	1.708	.818

Note: ρ is corr$(, t-1)$ within country.

E Rational Expectation Hypothesis

Table E.10: Rational Expectations Test

Country Name	Pre-IT	Post-IT
Argentina	.254	1.176***
	(.239)	(.054)
Austria	.446***	1.032***
	(.137)	(.095)
Belgium	.683***	.999***
	(.233)	(.090)
Brazil	.719***	.765***
	(.075)	(.098)
Chile	-.121	1.034***
	(.152)	(.071)
Colombia	.250**	-.325
	(.099)	(.351)
Czech_Republic	.833***	.830***
	(.142)	(.141)
Finland	.688**	.880***
	(.227)	(.083)
Germany	.449***	.856***
	(.082)	(.137)
Hungary	.177	.468***
	(.216)	(.151)
India	.757***	1.110***
	(.104)	(.031)
Ireland	.759***	.807***
	(.154)	(.155)
Israel	.914	.447
	(.627)	(.334)
Italy	.071	.678***
	(.226)	(.108)
Japan	.516***	1.027***

Table E.10: Rational Expectations Test

Country Name	Pre-IT	Post-IT
	(.193)	(.073)
Korea	1.043***	.840***
	(.227)	(.216)
Mexico	.538***	.414
	(.193)	(.379)
Netherlands	.716***	.832***
	(.159)	(.100)
Norway	1.039***	1.020***
	(.055)	(.033)
Paraguay	.657***	.909***
	(.110)	(.072)
Peru	.738***	1.080***
	(.064)	(.054)
Philippines	.761***	.873***
	(.220)	(.087)
Poland	-.233	.700***
	(.187)	(.108)
Russia	-.364	.806***
	(.296)	(.139)
South_Africa	.456***	.946***
	(.138)	(.103)
Spain	.387***	.735***
	(.109)	(.113)
Switzerland	.114	.706***
	(.083)	(.099)
Thailand	1.333***	.869***
	(.118)	(.096)
Turkey	.315***	.774***
	(.107)	(.065)
Ukraine	.878***	.729**
	(.084)	(.274)

Table E.10: Rational Expectations Test

Country Name	Pre-IT	Post-IT
United_States	.968***	.915***
	(.080)	(.061)
Uruguay	-.071	1.034***
	(.057)	(.188)

Note: Newey-West standard errors in parentheses.

F Forecast Revisions and Forecast Errors

Table F.11: Estimated Gain from Forecast Revisions on Forecast Errors (Announcement

Country Name	Pre κ	Post $(\kappa + \Delta\kappa)$	$\Delta\kappa$	$p(\Delta\kappa = 0)$
Argentina	.319***	.174***	-.145	.151
	(.091)	(.040)	(.101)	
Austria	.121***	.140***	.018	.561
	(.026)	(.018)	(.032)	
Belgium	.187**	.137***	-.049	.529
	(.076)	(.019)	(.078)	
Brazil	.175**	.173***	-.002	.981
	(.071)	(.057)	(.091)	
Chile	.233***	.233***	.000	.
	(.075)	(.075)	(.000)	
Colombia	.357*	.119***	-.238	.270
	(.212)	(.034)	(.215)	
Czech Republic	.215***	.142***	-.073	.291
	(.059)	(.036)	(.069)	
Finland	.143	.161***	.018	.873
	(.113)	(.017)	(.115)	
Germany	.159***	.159***	-.000	.998
	(.021)	(.024)	(.032)	
Hungary	.353***	.159***	-.193***	.003
	(.058)	(.023)	(.063)	

India	.086***	-.003	-.088**	.024
	(.032)	(.021)	(.039)	
Ireland	.149***	.164***	.014	.751
	(.036)	(.027)	(.045)	
Israel	.224**	.224**	.000	.
	(.088)	(.088)	(.000)	
Italy	.278***	.168***	-.110**	.026
	(.045)	(.019)	(.049)	
Japan	.163***	.138***	-.024	.419
	(.023)	(.019)	(.030)	
Korea	.135*	.137***	.002	.980
	(.072)	(.043)	(.085)	
Mexico	1.018**	.388***	-.630	.110
	(.397)	(.065)	(.390)	
Netherlands	.200***	.177***	-.023	.706
	(.056)	(.023)	(.061)	
Norway	.210***	.054*	-.156**	.024
	(.062)	(.028)	(.068)	
Paraguay	.300**	.190***	-.110	.435
	(.131)	(.047)	(.141)	
Peru	.129***	.129***	.000	.
	(.030)	(.030)	(.000)	
Philippines	.303***	.146***	-.157**	.035
	(.062)	(.031)	(.074)	
Poland	.591***	.174***	-.417***	.000
	(.076)	(.018)	(.078)	
Russia	.458***	.165***	-.292**	.035
	(.131)	(.039)	(.137)	
South Africa	.083**	.103***	.020	.689
	(.040)	(.032)	(.051)	
Spain	.359***	.139***	-.221**	.011
	(.083)	(.021)	(.085)	
Switzerland	.368***	.151***	-.217***	.000

	(.056)	(.020)	(.060)	
Thailand	.143***	.141***	-.002	.965
	(.036)	(.045)	(.053)	
Turkey	.399***	.225***	-.173	.207
	(.119)	(.067)	(.137)	
Ukraine	.113***	.222***	.108**	.033
	(.022)	(.042)	(.050)	
United States	.110***	.072***	-.038	.167
	(.025)	(.012)	(.028)	
Uruguay	.313***	.259***	-.054	.539
	(.065)	(.059)	(.088)	

Note: The last column presents the p-values for the test: $H_0 : \Delta\kappa = 0$. Newey-West standard errors in parentheses.

Table F.12: Estimated Gain from Forecast Revisions on Forecast Errors (Implementation Split)

Country Name	Pre κ	Post $(\kappa + \Delta\kappa)$	$\Delta\kappa$	p($\Delta\kappa = 0$)
Argentina	.318***	.223***	-.095	.317
	(.091)	(.034)	(.094)	
Austria	.139***	.136***	-.004	.916
	(.027)	(.022)	(.035)	
Belgium	.153***	.137***	-.016	.690
	(.035)	(.020)	(.040)	
Brazil	.175**	.173***	-.002	.981
	(.071)	(.057)	(.091)	
Chile	.627***	.125***	-.502***	.002
	(.157)	(.026)	(.159)	
Colombia	.092	.123***	.030	.736
	(.086)	(.036)	(.090)	
Czech Republic	.210***	.171***	-.039	.553
	(.055)	(.034)	(.065)	
Finland	.166	.153***	-.013	.962
	(.265)	(.017)	(.266)	
Germany	.163***	.156***	-.007	.853

	(.027)	(.026)	(.037)	
Hungary	.328***	.147***	-.181***	.004
	(.056)	(.025)	(.061)	
India	.087***	-.019	-.106***	.004
	(.032)	(.017)	(.036)	
Ireland	.150***	.169***	.018	.701
	(.037)	(.031)	(.048)	
Israel	.875***	.153***	-.721***	.000
	(.177)	(.036)	(.182)	
Italy	.245***	.169***	-.076*	.067
	(.035)	(.021)	(.041)	
Japan	.162***	.139***	-.023	.438
	(.023)	(.019)	(.030)	
Korea	.190***	.121**	-.068	.411
	(.056)	(.050)	(.083)	
Mexico	.399***	.209***	-.190**	.013
	(.066)	(.039)	(.076)	
Netherlands	.214***	.156***	-.058	.345
	(.055)	(.023)	(.061)	
Norway	.166***	.057**	-.109	.116
	(.062)	(.028)	(.069)	
Paraguay	.258***	.151***	-.107	.255
	(.085)	(.037)	(.093)	
Peru	.086	.128***	.042	.724
	(.108)	(.033)	(.118)	
Philippines	.300***	.138***	-.162***	.009
	(.056)	(.023)	(.061)	
Poland	.583***	.158***	-.425***	.000
	(.073)	(.026)	(.077)	
Russia	.457***	.165***	-.292**	.035
	(.131)	(.039)	(.137)	
South Africa	.074**	.105***	.031	.529
	(.036)	(.033)	(.049)	
Spain	.297***	.137***	-.161**	.014

	(.060)	(.022)	(.064)	
Switzerland	.336***	.153***	-.183***	.002
	(.055)	(.020)	(.059)	
Thailand	.119***	.177***	.058	.404
	(.030)	(.065)	(.069)	
Turkey	.353***	.072**	-.281***	.006
	(.095)	(.035)	(.101)	
Ukraine	.147***	-.032	-.178	.339
	(.027)	(.171)	(.185)	
United States	.088***	.074***	-.014	.618
	(.016)	(.024)	(.029)	
Uruguay	.314***	.198***	-.117	.175
	(.064)	(.056)	(.085)	

Note:The last column presents the p-values for the test: $H_0 : \Delta\kappa = 0$. Newey-West standard errors in parentheses.

G Additional Robustness Checks

G.1 New versus Old Targeters

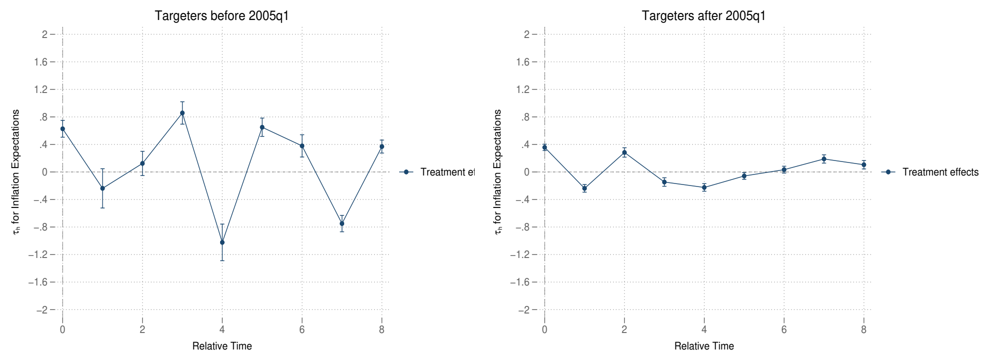
One of the features that is exploited in the event study is the different start dates of the policy. The different dates allow for the construction of the hypothetical which considers how the economies would respond if the policy was not implemented. However, there is one big factor that plays a role in these days. Some of the countries adopted IT after the financial crisis while others in the late 90s and early 2000s. The nature of global shocks was different at both these times. In addition, countries which adopted targeting later had evidence from previous adopters on how implementation. Therefore, this paper now tests whether new adopters of the policy had an advantage and if they were able to capitalise on it.

The data set is now split as per countries which adopted targeting before and after 2005Q1 (as per the announcement date). 2005Q1 is roughly the middle date of the sample period and allows the econometric methodology to still hold with a variety of adoption dates.

Figure G.1 and G.2 presents the findings upon dividing the sample between those who adopted targeting prior to and post 2005q1. An additional variable that controls for the Great Financial Crisis (GFC) is used to capture any effects of the time effects of the crisis. The results remain the same as those found previously. There is no significant change in inflation expectations on announcement or implementation of the policy. One interesting feature of this study however is the increased volatility of expectations for the countries which adopt IT after 2005q1.

Figure G.1: Old and New Targeters: Inflation Expectations

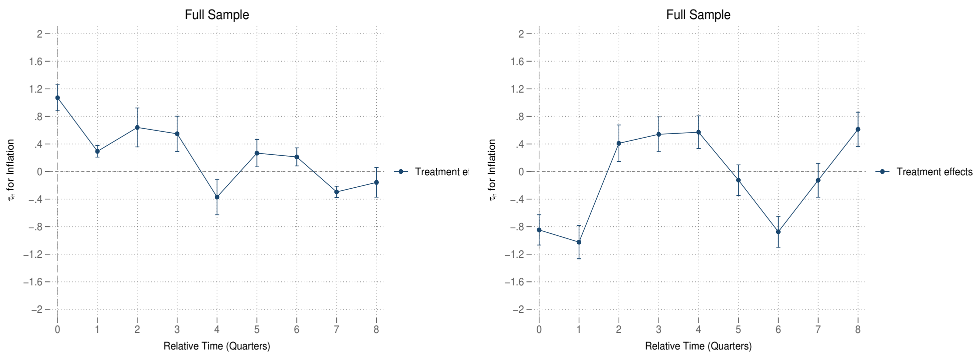
(a) Old Targeters (b) New Targeters



Note: the blue dots represent the point estimates τ_h of the average treatment effect, while the vertical lines depict the confidence intervals for each estimate. The x-axis measures the horizon (h) following the introduction of the policy. The confidence interval is measured at 95%.

Figure G.2: Old and New Targeters: Inflation

(a) Old Targeters (b) New Targeters



Note: the blue dots represent the point estimates τ_h of the average treatment effect, while the vertical lines depict the confidence intervals for each estimate. The x-axis measures the horizon (h) following the introduction of the policy. The confidence interval is measured at 95%.